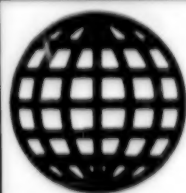


JPRS-UMA-93-031
25 August 1993



**FOREIGN
BROADCAST
INFORMATION
SERVICE**

JPRS Report

Central Eurasia

Military Affairs

Central Eurasia

Military Affairs

JPRS-UMA-93-031

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CIS/RUSSIA ARMED FORCES

Survey of CIS Armed Forces, Readiness

93UM0723A Moscow NOVAYA YEZHEDNEVNAYA
GAZETA in Russian No 10, 11 Jun 93, p 5

[Article by news agency "6th Floor" under the "From Unofficial Sources" rubric: "Your Disarmament Results: Not One Army, But 17, Perhaps More"; first nine paragraphs are NOVAYA YEZHEDNEVNAYA GAZETA introduction]

[Text] ... Abkhaz officer being consoled after suffering failure in attacking a position held by a Georgian officer: "Do not feel too badly about it. After all, you both received the same training in the FZU. (The "FZU" is the term used by graduates of the Ryazan Higher Airborne School when they refer to the institution.)

... According to an eyewitness, a Russian intelligence officer, "academicians" (graduates of the General Staff Academy, Russian MO [Ministry of Defense]) planned operations, one against the other, in Moldova, Tajikistan, and on the Abkhaz-Georgian border.

... Ukrainian newspapers have mentioned a report whereby Ukrainian Army officers, in response to any commendation they are awarded, often call out the customary "I serve the Soviet Union!"

Virtually all the sovereign armies which have formed since the breakup of the Soviet Army have retained with but slight changes the latter's forms, regulations, armaments, and internal structure. (In Latvia, several cases involving hazing have been brought to trial.)

I can understand Pavel Sergeyevich Grachev's wearing a new uniform so that he can be differentiated from defense ministers of the "armed forces of nearby countries."

Yet another characteristic is typical for the majority of armies: They are not capable of carrying out prolonged actions on a regular basis without logistical support by the Russian Army. We have already reported the fact that, for filling SU-25 needs, there is a logistical flow from Russia to Tbilisi.

There is another curious thing: In spite of the USSR's disintegration, the slogan "The people and the Army are united" is still used. The former Soviet people think of themselves as a single entity, while the armies of the new states, with the nature they possess, can hardly see fit to consider the Russian Army to be a "probable adversary," even though a pilot of general's rank was on the verge of starting a fight against another such person.

In all likelihood, the functions to be assumed by the new sovereign armies will shortly become police-like in nature, something which has already been demonstrated by Dzhokhar Dudayev, who used armor to do away with a referendum.

What we are doing today is publishing some unofficial information on the state of the sovereign states' armed forces, indicating that a single large military secret has been supplanted by almost a score of secrets of the sovereign states.

Armenia: Soviet Army Regulations Retained In Toto

Armenia's Armed Forces, undergoing formation on the basis of the "regiment-division" principle, consist of land troops, an air force, and air defense force.

In Armenia as of 1 January 1993 there were 258 tanks, 641 BTRs [armored personnel carriers], and 357 artillery pieces.

Armenia's Air Force is presently limited to one helicopter squadron (12 Mi-24 fire support helicopters). It as yet has no fixed-wing combat aircraft. There is a possibility that in the future the Air Force of Armenia will have in its inventory two or three squadrons of SU-27 or MiG-29 aircraft and one or two helicopter regiments. Large airfields equipped with hard-surface runways are located in the cities of Yerevan, Gyumri, and Khodzhal (near Stepanakert).

There is no effective air defense in Armenia at present, due to a lack of qualified officer cadre.

In spite of the considerable loss of ammunition suffered in the explosion of military depots in 1992, Armenian military circles feel that there are sufficient ammunition stores for several battalions to carry out two or three additional major operations.

The minister of defense and Armed Forces commander in Armenia is Vaagen Manukyan, a candidate of physical and mathematical sciences who formerly taught at Yerevan University. Serving as first deputy commander of the VS [Armed Forces] is Lieutenant General Norat Ter-Grigoryan, formerly deputy chief of Land Forces of the Soviet Army.

"Recruiters" make frequent trips between Armenia and Moscow, Minsk, and Kiev. According to reports, Armenian Armed Forces Deputy Commander Lieutenant General Ter-Grigoryan has approached his former colleagues (graduates of the General Staff Academy and members of central military directorates of the Russian Ministry of Defense and the OVS SNG [Unified Armed Forces, CIS] with an offer to make a switch to his republic's MO [Ministry of Defense], in which service they would be highly materially compensated.

Azerbaijan: Every Tenth Officer a Slav

In October of 1991, Azerbaijan passed the Law on the Armed Forces of Azerbaijan. Actual formation of a regular army began in the spring of 1992.

Most functional so far in the Ministry of Defense are the rear services, with the needs of the national army being covered by the manufacture of uniforms and footwear and production of food supplies, which according to some reports are associated with abuses. Nearing completion is formation of a general staff, operations directorate, and intelligence, rocket troops, artillery, and communications directorates.

Azerbaijan's national army has adopted as a basis for troop combat training the tactics and operational art of the former Soviet Army, with attendant regulations, style, and instructions. Officer ranks are patterned after the Russian, with the difference that they have been translated into the republic's language. In this connection, servicemen address each other by using the word "comrade."

Azerbaijan's only functional combat arm is her land troops. The Armed Forces consist of about 18,000 men, including

self-defense volunteer detachments, all of which amounts to 95 percent of the total manpower in Azerbaijan's Armed Forces.

Azerbaijan's PVO [Air Defense] troops, which are being formed on the basis of the Russian 129th SAM Brigade (19th PVO Army), number a grand total of ... four specialists of domestic national origin. The expectation is that it will be possible to sign on about 20 percent of Azerbaijan's air defense officers for contract service from the pool of Russian-speaking military specialists. With them on the rolls, it will be possible to organize four SAM battalions (with a total of 12 battalions in the brigade). With an inventory of repair kits and other special equipment left behind by the Russian troops, Azerbaijan's PVO troops will be capable of maintaining combat sufficiency for a maximum of two years, after which it will become necessary for them to purchase spare parts and equipment from Russia or other countries.

Plans call for full deployment of Azerbaijan's air force, to consist of fighter, helicopter, and transport craft, only by the year 2000. As of 1 January 1993, Azerbaijan had in its possession 24 combat helicopters, 124 MiG-25s and SU-25s, and 50 military transport aircraft.

In Azerbaijan there are seven airfields with hard-surface runways.

The naval force of Azerbaijan is being created with the Caspian Flotilla as a starting point. Presently in the inventory are 15 military craft: one patrol combatant; coastal and harbor minesweepers; amphibious warfare ships and landing craft. Crews for the combatants are all but formed, with command personnel consisting mostly of Russian-speaking officers serving on a contract basis. The fleet's technical condition is rated by experts as below standard, with a number of ships in need of immediate repair.

Presently in the inventory of the Azerbaijan MO are 260 tanks, 320 BTRs, 350 BMPs, 185 artillery pieces, 150 mortars, 35 Grads (BM-21s), and 2,200 machineguns.

Nagorno-Karabakh: Mercenaries Paid 250 Dollars

By 1992, the core of the armed forces of Nagorny Karabakh consisted of self-defense detachments with a total manpower of about 8,000 men. The leadership of the NKR [Nagorny Karabakh Republic] called for a general mobilization of the republic's citizens on the eve of the Kelbadzhar operation, which made it possible to place 30,000 additional men under arms.

Always in service in Nagorny Karabakh are the Armenian Expeditionary Corps (about 8,000 men) and the well-armed and trained detachments of the Dashnaksutyun Party (the national party of Armenia).

In addition, operating in the NKR are two or three heterogeneous companies of mercenaries, who have immigrated illegally into the Transcaucasus from Syria, Jordan, Italy, France, Israel, and a number of African countries. The mercenaries are recruited by representatives of the Armenian diaspora living outside their republic. Some reports have it that each mercenary is paid 250 dollars for a day of combat duty. The actions of the mercenaries are characterized by extreme cruelty, not only with respect to armed adversaries, but also toward women and children.

Georgia: Four Armies at War with Each Other

In January of 1991, the Georgian parliament voted to create the National Guard "for purposes of defending the republic." Previous to that, there were dozens of various armed formations and bodies of forces in Georgia. The Georgian Army's manpower presently stands at about 20,000 men, with more than half of them serving in the combat area in Abkhazia.

Recently replacing Tengiz Kitovani as Georgia's minister of defense was 27-year old General Georgiy Karkarashvili.

In addition to the National Guard in Georgia, there are four armies. The largest are the home guard and MVD forces of Adzharia, and detachments of followers of former Georgian President Zviad Gamsakhurdia active in Western Georgia under the command of Colonel Vakhtang Kobaliya (nicknamed "Loti").

The Abkhaz Army is acting on the side of the Abkhaz separatists. Two-thirds of this army are made up of volunteers and mercenaries (a battalion of Caucasian People's Conference; a battalion of Armenians; a battalion of Chechen; and detachments of Russian Cossacks). The Abkhaz Army has in its inventory modern T-72 tanks, armored vehicles, SU-25 combat aircraft, and several L-29 aircraft provided by Chechen President General Dudayev.

Opposing Georgia's National Guard in South Ossetia are armed detachments commanded by Tskhinval Prime Minister Oleg Teziyev. In the fall of last year, these detachments fought the Ingush and Georgians, displaying an impressive level of combat capability. They are armed mostly with automatic weapons and light armored vehicles.

North Ossetia: OMON Now a Powerful Strike Force

In 1992, North Ossetia acted in concert with the Russian MVD to create the OMON, which local authorities have made into a strike force armed with modern automatic weapons and light armored vehicles.

In addition, the North Ossetian Supreme Soviet sanctioned the formation of National Guard and home guard detachments, which have obtained weapons and combat equipment from the Russian Army garrison stationed in Vladikavkaz.

Chechnya: Virtually Entire Adult Population Armed with Automatic Weapons

Chechnya's army - the National Guard - consists of an air force and of armor and land units. Also, a battalion and various party and clan forces are members of the Conference of Caucasus People's. Total manpower numbers about 15,000 men. Commanding is President Dudayev, a former Soviet Army general of aviation.

Chechnya's armed forces, having nationalized Soviet Army's property located at the Khankala airport, now have in their inventory about 150 L-29 and L-39 trainers (offering a combat radius of 350 kilometers, with the capability of carrying two 100-kilogram bombs or two missile pods, each holding 16 unguided rockets). Also possessed by Chechnya are 42 tanks, 38 combat infantry vehicles (BMPs), 14 armored personnel carriers (BTRs), and 14 reconnaissance and troop vehicles (BRDMs).

Virtually the entire adult male population of Chechnya is armed with automatic small arms obtained as a rule from army depots.

Ukraine: Term of Service Shorter Than in Russia

In the Ukraine there are three military districts (the Carpathian, Odessa, and the Kiev), with up to 700,000 men, 20 motorized rifle and tank divisions, several airborne large units, three reinforced artillery divisions, and hundreds of special-forces units and large units. In aviation large units of four air armies there are 230 fighters and 620 ground-attack aircraft.

Plans call for the future Ukrainian Armed Forces to consist of land forces in the form of army corps (seven or eight combined-arms divisions, six or seven motorized rifle and tank brigades, two or three aviation brigades, six or seven artillery brigades); air defense troops (three aviation groups consisting of bomber, fighter, and transport aircraft; PVO units); naval forces (with the Black Sea Fleet serving as a model); and border troops, republic guard, railway and civilian defense troops.

Belarus: Depends Upon Russia for Tank and Aircraft Storage Battery Supply

This army has started with utilizing one of the most powerful military districts of the Soviet Army: the Belorussian (with a manpower figure of 180,000 men).

Construction of the army is proceeding via the cadre principle, with manpower needs being filled by a combination of universal military service and volunteer contract arrangement. Comprising the army are land troops, an air force, air defense troops, special troops, VV MVD [MVD Paramilitary Troops], and civilian defense troops. A change is presently being made from the division-army structure to the brigade-corps type. The mechanized brigade is to serve as the future basic operational-tactical unit of the Belarusian Army. To date there are three mechanized brigades operating at full strength (3,000 to 3,200 men).

The budgetary allocation for 1993 is 56.6 billion rubles.

Belarus is strongly dependent on Russia, which is exerting considerable effort to envelope the republic in close military and political ties, including membership in the Collective Security System. (Thus, discontinuance of the supply of storage batteries from Russia alone would cause Belarus armored and aviation large units to lose their combat capability within three months.)

14th Russian Army Apparently Must Share with the Dniester Moldavian Republic Army

Included in the armed forces of the PMR [Pridnestr Moldavian Republic] are the Dniestr Battalion (600 men), the National Guard (1,500 men), and several hundred home guardsmen. There are 3,000 fighters in territorial-rescue detachments in reserve. The army of the PMR is the potential recipient of some armor materiel and armament of the 14th Russian Army stationed in the Dniester region and consisting of two thirds of local residents. Involved in last year's fighting in the Dniester region on both sides were 15,000 men, about 400 armored vehicles, and up to 300 heavy weapons and mortars.

Tatarstan: "Military Council" Organized

The issue of creating domestic paramilitary structures was taken up in the first session of the Tatar Social Center (TOTs). Appearing in Naberezhnyye Chelny, Almet'yevsk, and Bugulma as early as 1991 were self-defense youth groups.

At the present time, the largest units of the Tatar National Guard are at the Kazan and Naberezhnyye Chelny branches of the TOTs (about 500 and 700 men, respectively). The Milli Mejlis Military Council has been organized; it is striving for Tatarstan to adopt an independent military policy.

Kazakhstan: A Unified Military Area with Russia

Kazakhstan's armed forces are to consist of an army, border troops, internal troops, and republic guard. The army in turn is to consist of land troops, an air force, air defense troops, naval units (on the Caspian), combat support, special and logistical subunits, and civilian defense troop units.

The military budget for 1993 has been approved at 69.3 billion rubles.

Turkmenistan: Allied with Turkey and Ukraine

The Turkmen national armed forces are patterned after the military units and facilities of the former Soviet Army that was stationed in the republic.

Of the more than 300 military units located on Turkmen soil, the Turkmen armed forces are receiving 200, with about 70 remaining under Russia's jurisdiction. The remaining units are either being disbanded or withdrawn. In general, being turned over to the Turkmen armed forces are an army corps directorate, two combined arms large units and special troops units, air defense and air force aviation units, technical support and logistical units, virtually all the armament, and other property.

Turkmenistan is the sole Central Asian republic which has not signed the Collective Security Treaty. To fulfill its military construction needs, it is negotiating with Turkey and Ukraine.

Uzbekistan: Military Experience Acquired in Tajikistan

Construction of the army started out with the former Turkestan Military District of the Soviet Army, with the headquarters located in Tashkent.

The Uzbek Army saw action in fighting the opposition in Tajikistan.

Tajikistan: Army to be Based on MVD Special Battalion

The first subunits of the new national army took the oath of allegiance in Dushanbe's main square on 23 February 1993. The core of this army is an MVD special battalion, which was organized with members of the militia and Committee on National Security (KNB) as early as November of last year. It was decided to have the first five battalions consist of People's Front volunteers. This year's plans call for creating land troops and an air force.

A brigade of KNB border guards has also been brought into being. This unit however will not be capable of holding the border without the aid of Russian border troops.

Countering Tajikistan's National Army are detachments of the Islamic opposition, which after their winter fighting are now located in northern Afghanistan. Specialists estimate that 15,000 men, armed with heavy weapons, are concentrated in that area.

Kyrgyzstan: A National Guard Organized

On 17 December 1991, a ukase issued by President Akayev, for purposes of "assuring the security of the republic as a sovereign state," initiated the formation of the National Guard. The guard's core were strike units at the MVD created by former Minister of Internal Affairs, later Vice-President, Feliks Kulov. At the present time, Kirgizia army (the National Guard) is in the formative stage. Kyrgyzstan is a member of the Collective Security Treaty.

Lithuania: Czech Aircraft Purchased in Kyrgyzstan

In contradistinction to the other former USSR republics, Lithuania undertook the creation of her own armed forces before the breakup of the Soviet Union. The backbone of the present Lithuanian Army are armed units of the Territorial Guard Department, which was created in the beginning of 1991.

Lithuania's armed forces, which are under the Ministry of Territorial Guard, consist of land troops, a navy, border troops, air force, and air defense service. Specialists from Scandinavian countries are playing a major role in constructing the army.

In April of this year, the Lithuanian Army conducted its first exercises involving the land troops and air force, with 500 men participating.

Lithuania was the first Baltic country to undertake construction of a domestic air force. The force consists of four Czech-made L-39 trainer aircraft purchased in Kyrgyzstan, two military transport aircraft donated by the German Bundeswehr, and 24 AN-24 aircraft. The Lithuanian air force is based on the former Russian Air Force airfield at Panevezhis.

The navy consists of two frigates, a training ship, and coast guard cutters.

Latvia: Navy Consists of Single Fishery Inspection Vessel Armed with Large-Caliber Machineguns

The year 1992 saw the development of a legal basis for constructing the armed forces and the adoption of a number of laws and statutes.

The state defense system consists of the national armed forces, nonmilitary state defense agencies, and national economic structures. The national armed forces consist of defense forces, home guard, and security service; in wartime or in emergency situations, they also include individual armed MVD units.

Structurally, the defense forces consist of the border guard force, mobile rifle forces, air force, air defense force, and units and special-forces subunits. Organizationally, construction is proceeding along the lines of the "battalion - brigade" concept. Manpower presently numbers 6,000 to 7,000 men, with 9,000 to 10,000 planned for the future.

The navy consists of a single fishery inspection vessel armed with large-caliber machineguns. Future expansion will

increase this inventory to 11 craft. Operational leadership of the defense forces is exercised by a commander, who is directly subordinated to the minister of defense.

Estonia Takes the Swedish Route

In the spring of 1993, Estonia's Ministry of Defense, which was organized 10 months ago, wrote the "Basic Principles of State Defense of the Estonian Republic." According to this document, Estonia faces an external threat in the form of Russia, while her internal threat comes from the Russian military force, Russian-speaking retired officers, organized crime, and the nuclear reactor located in the city of Raldiski.

The military doctrine, the same as that of Sweden and Switzerland, embraces the total defense principle. Actually, although Estonia does not as yet possess an army as such, efforts are underway to purchase weapons in various countries, from Russia to Israel; Estonian officers are being sent to Sweden to attend professional improvement courses; and a noncommissioned officer school has been opened in Tallin. Some clothing and communications equipment needs are being filled by Germany and France.

High hopes have been raised in Estonia with the appointment of 61-year old Aleksandr Eynsaln to the post of defense forces commander. He is a U.S. citizen, a veteran of two wars - the Korean and the Vietnam, and a retired colonel of the American Army.

Also existing in Estonia are detachments of the paramilitary organization Kaytseliyt, which, numbering several thousand in membership, is armed with automatic small arms.

Decree Lists Servicemen Eligible for Food Allowances

93UM0749A Moscow ROSSIYSKAYA GAZETA
in Russian 30 Jul 93 p 2

[Article under the rubric "The Army": "Dinner Is Served. Show Your Contract."]

[Text] The government of the Russian Federation has established food allowances for various groups of servicemen. The main thing, however, is that there be something from which to prepare the soup and porridge for the soldiers....

Decree No. 695 issued by the government of the Russian Federation on 23 July 1993 specifies that officers, seagoing and shore-based warrant officers and cadets at military educational institutions providing vocational training and serving under contract are to be provided with food at state expense according to the norms and by the procedure specified in the government's Decree No. 479-28 of 10 July 1992 for the corresponding groups of servicemen; NCOs, petty officers, soldiers and seamen in the military service under contract, according to the norms and by the procedure established by this decree for warrant officers.

In accordance with the Russian Federation's Law On the Status of Servicemen, the government has established a list of categories of servicemen serving under contract for whom messing is arranged at their place of service:

1. Servicemen on flight status, as well as other categories of servicemen eligible for food at state expense based on

Allowance No. 2 as established by Decree No. 479-28 issued by the government of the Russian Federation on 10 July 1992.

2. Servicemen serving on surface ships, submarines and support vessels of the Navy, in naval units (subunits) and formations of the border and internal troops, as well as those undergoing training at training centers of the Navy and at centers for training naval specialists for the border troops.

3. Servicemen permanently stationed at airfields, ranges, technical and launch centers and directly involved in servicing aircraft and providing flight support.

4. Servicemen performing combat alert duty (alert duty) or taking part in field exercises (or maneuvers) and in other cases in which, due to service or billeting conditions or family circumstances, it is difficult to deliver their food allowances to them personally and arrangements must be made for feeding them through the mess halls of military units.

5. Cadets at military educational establishments providing vocational training.

6. Servicemen undergoing treatment or examination at military medical (medical) subunits, units and establishments.

These categories of servicemen are fed at state expense.

Instead of being fed, these servicemen, with the exception of those under point 6 in the list, may be issued food rations personally or be paid the value of these rations.

Moscow Spring Draft Exceeds Planned Level

93UM0767A Moscow *SEGODNYA* in Russian 3 Aug 93
(Signed to press 02 Aug 93) p 6

[Unattributed article under the "In Moscow" rubric: "More Citizens Than Needed Called"]

[Text] The Moscow City Military Commissariat has informed the mayor's office that the spring call-up of Muscovites for military service has been completed. The plan drawn up by the staff of the MVO [Moscow Military District] specified that 5,253 men were to be called up in the spring of this year. The task was accomplished in the amount of 105 percent, with 5,500 men assigned to duty stations. The numbers of those assigned to the various combat arms are noteworthy: rocket troops, 322 men; PVO [air defense], 376; VVS [air force] units, 295; VMF [naval] forces, 294; border troops, 1,158; land troops, 672; MVD troops, 1,198. All the draftees have been assigned to duty within the borders of the RF [Russian Federation], with the exception of 70 men who volunteered for service in Germany (in the Western Group of Forces). Eighty "lucky ones" are destined to join the Black Sea Fleet.

Scoring highest in Moscow in the call-up were the Southern, South-Eastern, and Western Administrative Districts; falling short of task completion were the South-Western, Zelenograd, Eastern, and Central Districts. The draft boards sent call-up notices to 23,592 men; of that number, 21,745 youths reported, while 1,847 failed to report. In addition, of the total number of men receiving notices, 278 did not report for dispatch to their duty stations. Excused from

service for medical reasons were 7,274 men, while 808 were granted deferments to undergo a program of health improvement.

Changes in Supsov Decrees on Defense Laws

93UM0754A Moscow *ROSSIYSKAYA GAZETA*
in Russian 4 Aug 93 p 5

[Decree No. 5506-1 of the Supreme Soviet of the Russian Federation on Amendments to the Decrees of the Supreme Soviet of the Russian Federation "On the Procedure for Implementing the Law of the Russian Federation 'On Defense'" and "On the Procedure for Implementing the Law of the Russian Federation 'On Military Duty and Military Service'"]

[Text] The Supreme Soviet of the Russian Federation herewith decrees:

1. Point 4 of the decree passed by the Supreme Soviet of the Russian Federation "On the Procedure for Implementing the Law 'On Defense'" (VEDOMOSTI SYEZDA NARODNYKH DEPUTATOV ROSSIYSKOY FEDERATSII I VERKHOVNOGO SOVETA ROSSIYSKOY FEDERATSII, No. 42, 1992, p. 2332) is amended to require that the government of the Russian Federation reorganize the Main Military Maintenance and Restoration Directorate (henceforth, Main Directorate) under the Russian Federation's Ministry of Communications and military maintenance formations subordinate to it by 31 December 1999. The reorganization of military restoration formations is to be completed by 31 December 1997.

2. Point 2 of the decree passed by the Supreme Soviet of the Russian Federation "On the Procedure for Implementing the 'Law on Military Duty and Military Service'" (VEDOMOSTI SYEZDA NARODNYKH DEPUTATOV ROSSIYSKOY FEDERATSII I VERKHOVNOGO SOVETA ROSSIYSKOY FEDERATSII, No. 9, 1993, p. 326), in the application of the first part of Article 61 of the Law of the Russian Federation "On Military Duty and Military Service" pertaining to military maintenance formations and the Main Directorate's agencies for their command and control, is amended to specify that the transitional period mentioned in this law ends on 31 December 1999 and that of the restoration formations on 31 December 1997.

3. The second part of Article 61 of the Law of the Russian Federation "On Military Duty and Military Service" does not extend to servicemen serving in military formations indicated in Point 2 of this decree.

4. The period for signing contracts specified in Point 1 of Article 60 of the Law of the Russian Federation "On Military Duty and Military Service" is to be calculated from 1 August 1993 for servicemen serving in military formations specified in Point 2 of this decree. [Signed] Chairman of the Supreme Soviet of the Russian Federation

R.I. Khasbulatov

Moscow

Supreme soviet

23 July, 1993

No 5506-1

Official Obituaries of Polyanichko, Koretskiy, Kravchuk*93UM0750B Moscow KRSNAYA ZVEZDA in Russian 4 Aug 93 p 4***[Text] Viktor Petrovich Polyanichko**

The Council of Ministers and the government of the Russian Federation announce with great sorrow that Viktor Petrovich Polyanichko, head of the Interim Administration in the North Ossetian SSR and the Ingush Republic, died a tragic death on 1 August 1993 in the performance of his official duties.

The life of a remarkable man and prominent statesman who devoted his entire conscious life to serving his people has been cut short.

Viktor Petrovich Polyanichko was born in 1937 in the city of Rostov-on-Don. He began his working life as a metal worker-assembler at the Rostselmash plant. He helped build the Gay Ore Enrichment Combine and held administrative positions in Orenburg and Chelyabinsk oblasts and the city of Moscow.

Over a long period of time, as adviser to the top leadership in Afghanistan, he repeatedly risked his life in the performance of difficult missions.

Viktor Petrovich worked for several years in Azerbaijan, where he attempted to find acceptable solutions to the international conflicts. He believed in the rationality and goodness of peoples inhabiting the abundant land of the Caucasus.

The government of the Russian Federation appreciated V.P. Polyanichko's organizational skills and sent him to the region of the Ossetian-Ingush conflict. During his short stay as head of the Interim Administration in the North Ossetian SSR and the Ingush Republic and with the rank of deputy chairman of the Council of Ministers and the government of the Russian Federation, Viktor Petrovich did his best to rectify the effects of that conflict, to normalize the situation in North Ossetia and Ingushetia and restore tranquility to the lives of the peoples of those republics.

Viktor Petrovich was a good family man and a trustworthy friend of his colleagues on the job and of those near and dear to him.

A bright memory of Viktor Petrovich Polyanichko will remain forever in the hearts of those who worked and associated with him.

[Signed] Council of Ministers and Government
Russian Federation

Anatoliy Grigoryevich Koretskiy

Maj-Gen Anatoliy Grigoryevich Koretskiy, corps commander, died tragically on 1 August 1993 in the performance of his official duties.

A.G. Koretskiy was born on 12 January 1945 in the city of Novorossiysk. He graduated from the Ulyanovsk Guards Tank School in 1966, the Armored Troop Academy in 1975 and the General Staff Military Academy in 1985. He served as a platoon and a company commander, regimental chief of staff, commander of a tank regiment, deputy commander of a division, commander of a tank division, first deputy

commander of an army and commander of an army. A.G. Koretskiy had served as a corps commander since February 1993.

At all of his posts A.G. Koretskiy demonstrated great responsibility and competence, and devoted all his strength, knowledge and organizational abilities to enhancing the combat readiness of the units and formations. He gained the profound respect of everyone who worked with or knew him.

[Signed] Ministry of Defense
Russian Federation

Sr Lt Viktor Dmitriyevich Kravchuk

Sr Lt Viktor Dmitriyevich Kravchuk died in North Ossetia on 1 August 1993 in the performance of his official duties as a staff member of Russia's Ministry of Defense.

A young officer who gave his best years to serving the fatherland has departed this life. He was distinguished by his daring, courage, loyalty to duty, sensitivity and modesty.

He was repeatedly sent on official assignments to the most intense hot spots and always performed the most important assignments with honor. His colleagues knew him as a reliable friend and a sensitive and benevolent person, always ready to help someone in trouble.

The staff at the Ministry of Security and the friends and relatives of Viktor Kravchuk are deeply grieved by his tragic death.

[Signed] Ministry of Defense
Russian Federation

Supsov Officials Visit WGF, Discuss Social Problems*93UM0750A Moscow KRSNAYA ZVEZDA in Russian 5 Aug 93 p 1*

[Article by KRSNAYA ZVEZDA correspondent Sergey Pashayev under the rubric "From Our News Bureau": "People's Deputies Visit Western Group of Forces"]

[Text] A working trip by a group of people's deputies of Russia headed by Sergey Stepashin, chairman of the Committee for Defense and Security of the Russian Federation's Supreme Soviet, to the Western Group of Forces has ended. Prior to returning to Moscow the members of parliament met with administrative personnel of the group of forces and with journalists, briefing them in detail about the results of the trip and about measures already being taken to solve the social problems of the troops withdrawn from Germany.

During the meeting with the press Stepashin reaffirmed the statement made in ITAR-TASS the day before that talk of corruption in the Western Group of Forces must be stopped, since reports of such occurrences in the WGF are without foundation. The committee chairman also expressed concern about the concentration of immigrants around Russian military garrisons and the increasing frequency of criminal infringements toward the servicemen and their families.

Volga MD Official on Problems Relating to WGF Withdrawal

93UM0779A Moscow KRASNAYA ZVEZDA in Russian
12 Aug 93 p 2

[Interview with Lt Gen Anatoliy Aleksandrovich Shapovalov, first deputy district commander, by Col Andrey Bondarenko and Lt Col Oleg Bedula, KRASNAYA ZVEZDA correspondents, under the rubric "Troop Withdrawal": "How Does One Get Settled in Russia?"]

[Text] Trainloads of personnel, equipment, weapons and supplies of Russian units and subunits being withdrawn from distant foreign parts arrive day and night in the Volga Military District. For the second year now Lt Gen Anatoliy Shapovalov, first deputy district commander, has been responsible for this difficult job. He is interviewed today by our correspondents.

[Correspondent] Anatoliy Aleksandrovich, when asked a year ago how the withdrawn troops are being set up, you remarked that the main difficulties lie ahead. It would appear that their time has now arrived, would it not?

[Shapovalov] Yes, these tasks have grown many times over and have now perhaps reached their peak. Nonetheless, everything is going according to schedule. We were ready both psychologically and organizationally for a job of this magnitude. What we did not anticipate was a serious breakdown in the resolution of personnel problems. Judge for yourselves. Foreseeing these difficulties, I left with a group of officers for the Western Group of Forces, where we had thorough discussions with the officers and warrant officers. We received assurances that they would be serving precisely in the Russian army. When the units began arriving in the district, however, almost a third of the officers and warrant officers submitted requests for transfer. It was also learned that many of them had already received orders or calls to serve in other CIS countries.

Col Grigoriy Bukhun, commander of an anti-aircraft missile regiment, for example, who declared in front of all the unit personnel that he was firmly resolved to serve only in Russia's armed forces, began building contacts with the personnel directorate of the Ukrainian army after arriving here, in the Volga region. He stated that he was leaving immediately for Ukraine's armed forces. Such behavior is more than just dishonorable, because it involves not just moral loss. A regiment is an extremely complex management entity, and at the moment of its redeployment the commander must take on the resolution of all its problems and assume responsibility for everything. It has now become known that shortages were uncovered in Bukhun's regiment when it was received. Under current Russian law only the amount of pay for one pay period will be withheld from the regimental commander's pay. The Russian army will make up the rest....

The problem of preserving the property being withdrawn is becoming extraordinarily acute in general. All of the property in Germany is loaded onto German-built transport. When it is transferred to our railcars at the borders of the CIS countries or the Baltic states, problems arise with the securing and transporting of all types of freight. We propose that containers be used, that monitoring and security be enhanced and that accountability be stepped up.

Take the ports of Leningrad and the Port of Kleipeda. We have to refuel the vehicles delivered there. The fuel disappears from the tanks. We are therefore allocating a double amount of fuel, which is not covered by any of the set limits. At the district's expense, of course.

[Correspondent] The housing problem has intensified in recent months. And even though, generally speaking, it would have had to intensify—the number of families of officers and warrant officers moving into the Volga and pre-Ural regions has increased drastically during the summer months—the situation is clearly becoming difficult. Is something being done to mitigate it?

[Shapovalov] Back when we were in the Western Group of Forces, we spoke extensively with the families of officers and warrant officers on the subject of housing. We learned that 107 families in tank division X, for example, had nowhere to hang their hats in Russia. The others could live for a time with relatives, parents or acquaintances. We began readying housing for these 107 families first. Despite a gentlemen's agreement, however, twice as many families arrived. Something had apparently not worked out for the people. We did not refuse anyone, of course, but many of them will have to live for a while in cramped quarters.

The main difficulty lies elsewhere, however. The target date for the release of military posts by foreign firms was 31 December. We are supposed to receive all 100 percent of the housing and the complete infrastructure in the city of Chaykovskiy in Perm Oblast by that date, for example. And we are supposed to receive 700 apartments, a school, a kindergarten, stores... in the settlement of Chernorechinskiy in Samara Oblast. Under a contract for the finishing work, however, the foreign firms are granted an extra 2 months. If the builders need that extra time, the posts will not be ready for occupancy until March of 1994. How are the people who have already arrived from the ZGV [Western Group of Forces] to live through the winter? The situation is almost hopeless. It can be resolved only with additional financing.

Another aspect of the funding problem is that we need 36 billion rubles right now for the construction of barracks and housing. We do not have that money, however, and the construction workers with Votkinskstroy have therefore worked a month essentially without pay. They have now halted construction work on three barracks.

[Correspondent] Is it possible in this situation to organize the training process and maintain the needed level of combat readiness in the forces?

[Shapovalov] The Ministry of Defense has allowed us the time needed to perform the job of setting up and deploying the units. Nonetheless, we are making an effort to see that the people do not lose their occupational skills. The problem is that very few NCOs and other enlisted men are arriving with the withdrawn units. Compare these figures. Only 41 of the anticipated 2,500 arrived with tank division X. It is not due to the good life that mainly officers and warrant officers are performing the service duties in some units. The guard details there are also made up entirely of officers.

[Correspondent] Which of the problems you have mentioned is the district capable of resolving on its own?

[Shapovalov] We have already submitted our proposals for resolving the personnel issue to the Ministry of Defense. It

would be expedient, for example, to sign contracts with officers of the Western Group of Forces. This would make things clearer with respect to their continued service. With respect to housing, if the money to complete the construction is not forthcoming, we plan to look for dormitory space to lease. There is no other way. If worse comes to worst, we shall vacate barracks and use them as housing.

[Correspondent] Anatoliy Aleksandrovich, how are your relations with local authorities developing in this difficult situation?

[Shapovalov] They are developing well. We have complete mutual understanding with Vasilii Yavon, administrative head of Volzheskiy Rayon in Samara Oblast, for example. Or take Kinel-Cherkassy. Vladimir Garayev, the rayon administrative head, has allocated dormitories and worked out the problem of schools, food, medical and personal services.

Those in charge of the enterprises with which we have to work have also been understanding and cordial. Furthermore, the directors of five sovkhozes have signed an agreement with the command element of the Chernorechinskiy Garrison for fall provisions and allocated 100 plots for gardens and dachas.

In general, I have to say that officials in Samara, Perm, Penza, Orenburg and Saratov oblasts have shown real concern for the military. We thank them for that. The situation concerning the designation of land on which to build facilities for a tank division is still being dragged out in Udmurtia, however. The work is continuing, nonetheless.

CIS: POLICY

Call for Military Professionalism, Civilian Parliamentary Control

93UM0781A Moscow *FEDERATSIYA* in Russian
31 Jul 93 p 3

[Interview with Yuriy Ivanovich Deryugin, candidate of sociology, cochairman of the Association of Military Sociologists, by Gennadiy Piskarev under the rubric "The Army and Society": "The Mojahedin, Rust and Others"]

[Text] Events on the Tajik-Afghan border appear to have shaken up our society, sunk in strife and in a soul-devouring struggle for survival. Once again the people have turned their eyes to the army as the authority of both the well-off and the alienated and wretched. Many regard its preservation as the guarantee of the preservation of Russia's statehood and national character.

We say that our country is in a period of transition from a totalitarian to a law-based, civilian society. In that case, however, democratic authority and civilian control must be established also over the military. Is this compatible with the functioning of the armed forces, however, the underlying principles of which are rigid discipline and one-man command? Is it possible, particularly in our extreme situation, in the situation of instability, for the society or, let us say, the parliament to intervene in the army's "internal affairs"? Would this not hamper the strengthening of the army, already greatly shaken by these very civilian currents?

This was the subject of our conversation with Viktor [sic] Ivanovich Deryugin, candidate of philosophy and cochairman of the Association of Military Sociologists, a man familiar with life in the armed forces both at the bottom and at the top, one who worked with military personnel following both the Chernobyl disaster and the Leninakan earthquake, and at many of the current hot spots.

"You know," the interviewee began, "Russia, our motherland, is a country with a fairly specific code of development. It came into being as a collective, democratic state. And when they say that a parliamentary republic is not suitable for us, that is the devil talking. Yes, for many years centralized, unified, totalitarian authority was exercised in our country. But then Russia suffered from that. And there were rays of hope for it when democratic principles began to be intensively organized.

[Piskarev] Have we not strayed from the subject, Yuriy Ivanovich?

[Deryugin] Not at all. Remember history. As soon as democratic forms of government began to be established in Russia, war and aggression ensued. And democracy went out the window. Columbus' ships were just approaching the New World, the future democratic America, when our ancestors were already fighting foreign invaders. In Smolensk—the war city, as it later came to be known—elderly monitors sat in deep shafts winter and summer to determine the direction from which the sound of the hooves of enemy cavalry would come, like today's sonar operators. Even then, incidentally, our warriors were forced to employ something like chemical weapons—ox bladders filled with sewage dropped onto the enemy's heads from fortress walls.

[Piskarev] That is all very interesting, but....

[Deryugin] Even in the situation of almost "eternal combat," as Block put it, our people did not lose their cohesiveness: One for all and all for one. And then take the Zaporozhye Host, a totally military organization. As a social structure, however, it was democratic, with sovereignty of the people. And the Novgorod Veche. Was this not the optimal way of life—civilian and military people, so to speak? Let us take a more recent example, that of the State Duma and its functioning during the first years of the imperialist war. It did so much for the army at that time and provided such effective help for the troops at the front!

When we moved toward an authoritarian form of government, though.... On the one hand, it seemed like a good thing, with power in certain hands, less disorder and vacillation. This constrains initiative at the lower levels, though. Rust's flight to Moscow.... He was "guided" from the very border by PVO [air defense], you know. It would have been a very easy thing to shoot down the intruder. We kept looking "above," however, and there was no one there. There have been so many such instances.

[Piskarev] I can cite one. When the Mojahedin and the insurgents shelled Outpost 11 on the Tajik-Afghan border, instead of sending helicopters to save the soldiers, the commander of the border detachment began coordinating their departure with superiors. A lot of time was spent on this, and the outpost suffered casualties.

[Deryugin] There you have it. Incidentally, a group of our members of parliament recently returned from there. What

conclusions did they derive? What lessons have the conflicts on the Tajik-Afghan border taught us? The first thing they understood was that the inertia of the old thinking will continue to lead to such tragedies. Regrettable as it is, we lack the legal mechanism for taking action in case of a direct threat to the state, and there is no precisely defined interaction between the army and the border troops. There are plenty of instances of inefficiency and negligence, however. Some people are attempting to depict Pavel Grachev as some kind of hero, grieving and demonstrating paternal concern for the fightingmen. In fact, a very cynical attitude is taken toward our people. Otherwise, why were the outposts not provided with engineer preparation? Why was the decision not made to reinforce border security? Why was a forward detachment not sent out? Why did it take so long for the border troop reserve to come to the rescue? Why did the helicopters not take off? Why did no officers go to the outposts, not even from Dushanbe?

In short, the trouble on the Tajik-Afghan border has further convinced the public that civilian, parliamentary control is essential in the military.

[Piskarev] What sort of control do you see?

[Deryugin] First of all we need a law on military authority, which would specify the president's functions in the military area, those of the parliament and the Ministry of Defense. Like the one in the States, let us say. I am not an advocate of foreign experience. If our experience is not entirely satisfactory, however, there is nothing disgraceful in learning from others. This law in the USA grants the president authority to employ the armed forces in combat abroad for 2 months without the approval of Congress, if this becomes necessary.

[Piskarev] When disturbances arose on the border, however, our president was not even at his post.

[Deryugin] And what do we have a vice president for? The fact that he has been stripped of all authority, which is absolutely unacceptable, is a different matter. This is where we need an appropriate law. The law is sacred. If it breaks down, the state will suffer a disaster. God forbid that some unbridled country and its extremist military leadership should attack our southern border, let us say, knowing that the economy and the army are falling apart and that the president and vice president are bickering with one another.

What would we do in that case? Issue a call: "Rise up, enormous country"! But then the heroic mentality today is far from that of '41. That is why I try to demonstrate everywhere that the main thing in the reform of the post-totalitarian state is to develop a highly professional army subordinate to and controlled by the lawful agencies of power and the entire society, one which operates strictly on the basis of the constitution.

[Piskarev] Yuriy Ivanovich, do tell us in somewhat greater detail about this civilian and parliamentary control.

[Deryugin] Parliamentary control is a form of civilian control. The people merely delegate their control functions to the parliament. The main thing here is to monitor adherence to the military budget. Its passage must be public and permanent. And it must take into account both outlays and revenues. Distribution proportions must be strictly observed: that for personnel, for scientific research, for

equipment and weapons. The president must report to the parliament annually on the state of national security, the armed forces and the military budget. This is important for the president himself. If his report is a good one, the prestige of the first person will unquestionably grow in the society. Respect by the president for the parliament must be the usual thing. Parliaments are criticized in all countries of the world to be sure, of course, but nowhere is their disbandment considered.

I believe that the parliament has an obligation to appoint powerful ministers, not just formally but in actuality, and the Committee for Defense and Security should be headed by a person independent of the minister of defense, unlike our current Lt Gen Stepashin—by a politician.

[Piskarev] What? By a person unfamiliar with the military?

[Deryugin] He will have his experts and specialists. We need to increase the number of subcommittees, of course, not cumbersome formations frozen for the centuries, but mobile structures capable of altering their numbers and composition with the changing situation. We need an institute for parliamentarianism, which would work on such subjects as "Parliament and the Army," "Parliament and the Economy"....

[Piskarev] We have the State and Law Institute for this purpose.

[Deryugin] It deals with general issues, and the problem needs to be focused upon. It would not be a bad thing to introduce the institution of parliamentary secretaries, as they have in England, who would have the status of deputy ministers of defense. Grachev would then not have to request additional authority to handle problems arising on that Tajik-Afghan border we have mentioned so frequently. Problems would be solved automatically.

With respect to civilian control in the direct sense of the term, this would obviously be control on the part of public organizations. Its field would be the life of people in the army, that with which the Committee of Soldiers' Mothers deals, for example. Coffins started coming in from the forces, and the committee came into being. I am confident that reality will force us to consider the need to set up other structures which operate according to the same principle.

In conclusion, I would like to stress particularly the fact that democratic authority is established over the military in order to rule out the possibility that newly appeared dictators, extremist groups and populists of various stripes will use power formations for their own purposes (I would note that the law governing military authority came into being in the States just when imperialism began to emerge in the nation). In our wretched situation we do not need an army ready to sweep into the capitals of other countries on tanks or into Russia's cities and villages to quell disturbances. We need an army for self-preservation and self-defense. We absolutely must have that defense adequacy without which the idea of common statehood could simply perish.

P.S. I feel I should add to what has been said the fact that Yuriy Ivanovich is also deputy chairman of the coordinating council for the Movement to Support Parliamentarianism in Russia—G.P.

CIS 'Single Defense Space' Advocated

934D0374A Moscow NEZAVISIMAYA GAZETA
in Russian 6 Aug 93 pp 1, 2

[Article by Lt-Gen Leonid Ivashov, secretary of Council of Defense Ministers of Commonwealth States: "The Defense Territory Must Be Unified To Exist at All"]

[Text] As we know, the heads of six CIS states—Armenia, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan—signed a treaty on collective security on 15 May last year. Soon afterward, however, there were many critics of the document in the Russian Federation who made every effort to prevent its ratification by the Russian parliament by making references either to the rigidity of its provisions or to the absence of a mechanism for its implementation and so forth.

We will not go into the reasons for the opposition to the unified system of collective security, because this is not part of our present topic, but we have to admit that the treaty is certainly not flawless. Some articles might warrant criticism. Nevertheless, we have to keep sight of the main thing: In the final analysis, the treaty will satisfy the security interests of all of the Commonwealth's people and will serve as the legal basis for the system of collective security. Besides this, it will allow for an "easier" transition from the strictly centralized system of defense that existed in the USSR to the new form of military-political cooperation based on the equality and partnership of the sovereign states, and the retention of our operable common defensive systems (air defense, ballistic missile defense, and others).

The failure of the Russian parliament to reach a quick decision on the treaty held up the implementation of many agreements signed within the CIS framework on military issues, left certain questions of military cooperation unanswered, and aroused apprehension with regard to the Russian Federation's possible intentions in its treaty and Commonwealth partners.

Now that the treaty has finally been ratified by the Russian parliament, the other signatories can relax, but the difficult job of establishing a mechanism for its implementation will have to be performed before it can "start working." The choice of the right direction from the very beginning will necessitate the clear perception and understanding of the distinctive features of the agreement, its possible prospects, and its implications for the parties to the treaty and for other republics of the former USSR and the whole world community.

Will Russia benefit from the treaty? The deputies agreed unanimously that it will, and I do not think this is surprising.

The establishment of the collective security system could create something like a "safety zone" near Russia's borders in Central Asia and the Caucasus. If Russia were to stay out of the system, however, there would be no guarantees against the involvement of the sovereign states in certain blocs with some degree of hostility toward the Russian Federation. Attempts of this kind have already been made. In this case Russia would have to deploy additional groups of forces and arms and install the elements of a defense infrastructure along the perimeter of its borders, which would require huge and unpredictable material expenditures.

Russia's participation in the system of collective security in the Commonwealth would also produce political benefits because of its Eurasian geographic status and its role and place in the Commonwealth and would do nothing to injure its international prestige. Incidentally, if the treaty had been ratified earlier by the Russian parliament, Russia's participation in the "Tajik operations" would have been viewed in a completely different light by the international community—as nothing more than the fulfillment of its ally commitments.

How do the other republics of the former USSR and adjacent states feel about the unified system of collective security established by the six CIS states?

First of all, it is important to stress that the treaty cannot be viewed as an infringement of the security interests of neighboring states not party to the treaty, and mainly because there is no suggestion in any of its provisions that it is directed against any particular state or group of states. In the second place, participation or nonparticipation in the treaty was a matter of political choice for each state.

In view of the present political situation, there is probably no reason to expect the Baltic states to join the collective security system of the CIS. Direct participation by Moldova, Georgia, and Azerbaijan in the near future is also unlikely. The Turkmenistan leadership is now pursuing a policy of non-alignment with the collective security system.

As for other states, such as Ukraine, its laws stipulate that the country will not belong to any military blocs, alliances, or other structures of this type. Nationalistic political forces are vehemently opposed even to Ukraine's membership in "alliances" of a non-military nature. The treaty, however, excludes the possibility of the membership of its signatories in military blocs and alliances. Therefore, there is nothing to keep Ukraine from becoming party to the treaty.

The Republic of Belarus is now deciding whether it will join the collective security system and sign the treaty. It is possible that the Russian parliament's decision will inspire a positive choice.

It would probably be much more realistic to assume that the CIS states that are not party to the treaty will participate in the system of collective security in the near future in other, more flexible forms, perhaps through bilateral relations with the states party to the treaty or even on a multilateral basis in the case of separate elements of the defense system.

After the treaty on collective security had been signed, no one in NATO or the CSCE expressed any worries or doubts about this. They did not feel that the treaty was contrary to Russia's international commitments. Only a few people in the West, and in Russia as well, objected to this kind of consolidation.

Furthermore, as the all-Europe process continues and a single system of collective security is established for all of Europe, the treaty could become an important link in the development of this system, covering much of Europe and a large part of Asia.

We can be certain that the enactment of the treaty on collective security will not cause the creation of regional military blocs in Asia and in the whole Asian-Pacific zone to counterbalance this agreement. The reaction of other states to the earlier ratification of the treaty by the parliaments of five CIS republics, after all, was completely calm. Besides this, Russia's participation in the treaty is viewed in the Central Asian republics as a positive factor, capable of contributing to stability in the region.

The very content of the treaty attests to its strictly defensive aims. It establishes the procedure for holding consultations on measures to repulse aggression and defend the independence and territorial integrity of the states party to the treaty. In addition, it provides for the necessary flexibility in the decisionmaking process and the choice of the appropriate steps, stipulates the procedure for the inclusion of other states in the treaty framework, and also contains the necessary provisions prescribed by the standards of international law.

In short, all of the main conditions for the implementation of a fundamental defense agreement by the CIS states already exist, and we can only hope that we will have the sense to stop disrupting the single defense space and begin making a concerted effort to restore it. Under present conditions, our defense territory must be unified if it is to exist at all. This is true even for a state like Russia.

CIS: STRATEGIC DETERRENT FORCES

Further on Woes of Nuclear Weapons Labs

93WC0099A Moscow *SEGODNYA* in Russian
No 40, 6 Aug 93 p 11

[Article by Mikhail Chernyshov: "The Tragedy of Arzamas Will Also Reach Moscow: Nuclear Warheads Cannot Be Goods Sold on the Free Market"]

[Text] So, what will happen if a warhead detonates at your enterprise?

The emissaries of atomgrad think for a long time while searching for a diplomatic response. The list of unrevealed state secrets prevents those who have body and soul entered into the shadow of the first department from being frank. But, finally, having taken a breath, both answer nearly simultaneously: "We would not want to frighten anyone, all the more so, to blackmail anyone. The situation objectively appears to be as follows: nothing will remain of Arzamas-16, but it will reach Moscow ...

Today not only the dangers associated with the careless handling of nuclear warheads threaten Russia's nuclear cities. The social explosion among those who were at one time called intellectual and the flower of the nation, those who forged, as it was then expressed, "the Homeland's nuclear shield" continues to fester. We have managed to temporarily prevent that explosion. But for how long?

"It is impossible to assert," said Russian Federal Nuclear Center Director Vladimir Belugin, "that we have received less than our rightful share of the leadership's attention. Yegor Gaydar visited us at one time. Viktor Chernomyrdin came. We received the President of Russia in February 1992. The oblast leadership attentively listens to us.

Everyone convinces us that Russia needs us. However, the matter does not progress beyond words."

The money that has been allotted to the city systematically "strolls" somewhere and the banks place it into circulation. There was a catastrophic delay with the distribution of salaries. People are only receiving their salaries for June today. The average salary amount is 36,000 rubles. Managers of major subdivisions have less than conductors on railroads.

We are not demanding anything excessive. We need at least financial certainty and an understanding of the prospects. Our product—nuclear warheads—cannot be goods sold on the free market. If the state actually needs us, we need to know to what degree this need extends...

Right now it has become simpler with international contacts. We are meeting with experts of American nuclear centers such as Los Alamos, Livermore, and others. There are more than a dozen of them in America and their annual budget is nearly \$11 billion. Just two centers—at Los Alamos and Albuquerque—receive \$3 billion. But our Arzamas-16 that performs those same functions receives R7 billion, current, totally worthless rubles. We need, not for operations but just for existence, at least three times that amount...

Recently approximately 700 people, primarily young people, have left the city. They are leaving for business where they are obtaining ten times as much than they can earn here. And this flight from the profession is still not the worst variation. Today how can we counter that same Saddam Huseyn whose emissaries have offered to immediately turn over half a billion dollars for just one warhead?...

Our intellectual flowers have opened behind the blank fences of special cities and special centers. The flowers that worked there have been abundantly fertilized with scientific degrees and government awards, increased salary coefficients and supply according to the highest category. And now the thistle of state indifference has overgrown the now never well-groomed hothouse flower beds. Arzamas-16, the Chelyabinsk numbered cities and other secret cities have managed to be in a "pre-strike condition". For the time being, no one can intelligibly explain what this concept means. But the essence is not in the terms. The probability of an "unfortunate incident" in production is increasing due to the loss of skilled specialists, the decline of discipline, and the general confusion.

"Our warheads," said Atomic and Hydrogen Weapons Chief Designer Stanislav Voronik, "have traveled a long path in their development. For example, a warhead that was installed on Korolev's 'semerka' weighed five tonnes. But a current megaton bomb weighs a total of 300 kilograms and that is equivalent to a million tons of TNT. Previously, special people installed detonators only in a so-called 'silver tent'. Today the degree of safety of detonators has immeasurably increased. They do not activate either during an accidental explosion, during fires, or when struck. But nevertheless, It's as if there should also not have been Chernobyl. But irresponsible and incompetent people literally forced the reactor to operate in an explosive regime."

Today they have begun to more frequently transport warheads by rail. Nuclear warhead disassembly problems are

arising as a result of disarmament. But disassembly is nearly as complex as the manufacture of warheads. We cannot exclude the possibility of sabotage. And not nearly by hirelings of the "sharks of Imperialism" but of any bitter person who has lost control of himself. Besides nuclear materials, there is a conventional explosive in a warhead. Firing a round into it will result in a conventional explosion—there will not be a thermonuclear "mushroom" but the pulverization of plutonium will occur. And that is a horribly poisonous substance. And, essentially, we will get a second Chernobyl...

The demographic composition of the atomgrads is drastically changing. The population is aging and experts are talking about the fact that this variation is possible when the weapons will remain but no one will know how to handle them.

They have had to suffer quite a lot for being "God's selected people" and for the privilege of residents of secret cities. As a rule, they sent here specialists from major educational centers—Moscovites, Leningrad residents, and Kiev residents... They selected the most reliable and the most tested "for patriotism". But, according to the irony of fate, they trusted them least of all. A person, who ended up in atomgrad and who obtained "access" automatically became someone who couldn't leave. They did not only not know about the scientific stars of the first magnitude abroad, but even in the neighboring village that is located on that side of the multi-contoured fences and the plowed control-border strips. You could not invite even your closest relatives to visit you, already not talking about your friends. People of Andrey Sakharov's stature could be sent on a trip abroad only with the authorization of the head of state. Such authorizations were very frequently not granted.

In recent years, we have learned that we have dozens of atomic cities that are scattered throughout the country. There are three numbered Chelyabinsk, two Sverdlovsk, two Krasnoyarsk and Penza. The largest of them is Tomsk-7 where there are more than one hundred thousand residents. The smallest is Zlatoust-36. There are a little more than 30,000 residents there. According to data of the current Russian Federation of the Ministry for Atomic Energy Chief Viktor Mikhaylov, a total of approximately 700,000 people live in these cities. There are a total of one million in the sector. A little less than half of them are involved in the industry. Nearly 16%—science, one fifth—builders and, the rest—service spheres. The former Sredmash [Ministry of Medium Machine Building] is frequently called that structural composition of "a state within a state". A closed complex of enterprises exists that is technologically linked to itself. This is the extraction of raw materials, the production of fissionable materials, the manufacture of items from them, reprocessing spent fuel, and the burial of wastes. The appropriate infrastructure that is required for life and work was created at one time along with the enterprises—there are more than 150 of them.

By the will of fate, the author of these lines at one time managed to visit several atomgrads and to even live for a while at these "facilities". I can attest that all of them are as similar to each other as twin brothers. If not for the surrounding landscape—the smooth Urals mountains or the pensive Kazakh steppe—you wouldn't be able to distinguish one from the other. Incidentally, only one atomgrad—

Semipalatinsk-21 (Kurchatov) has currently remained outside Russia. Its fate is more than murky. So, all of the cities are distinguished by the simplified planning and by the standard "Khrushchoby" [Khrushchev slums] five-story apartment buildings. There is a central square with the necessary Officer's Club or something similar. The same types of stores, schools, and kindergartens.

All of the lives of the city residents are tied, as a rule, to one type of production. City residents are allocated private plots for supplying themselves with vitamins. But to a great degree—at least it was until recently—they were tiny plots which, of course, were not capable of supplying a family with fruits and vegetables for an entire year. The state leaders saw their own sense in this stinginess—with an abundance of adjacent free lands. Nothing should divert the scientists from their primary task. But then again, not only scientists, but all remaining inhabitants of the cities.

"They keep repeating over and over again to us all of the time," said Vladimir Belugin, "that we need to go to the West and study management. But an American manager doesn't know a tenth of what a Russian director must do. Where to get the sausage, milk, and potatoes for the Center's workers? How are things with kindergartens? With transportation? With water and heat for apartments? The director is responsible for the regime so that moose and drunkards do not penetrate the barbed wire..."

At one time there was a red stripe system. If a paper with that mark arrived at some enterprise, everything was set aside and our order was fulfilled. That is currently perceived as a legend. They transported underwear by airplane to Moscow, 400 kilometers, to be washed. When the city grew, they built a meat combine nearby. It prepared practically its entire output for us alone. Later, the obkom reduced our share to 70%, it turned out that everyone likes the good products. But later there has been practically zero attention to us...

The atomgrads were founded in 1945-1953. Subsequently they only expanded. For the sake of secrecy, locations for them were selected far from populated areas and busy highways. Sometimes it is said that all of this is the invention of Lavrentiy Beriya who built essentially scientific GULAGs. Not in defense of the vampire was it said that this is nonsense. Read the literature on the realization of the American atomic Manhattan Project or about the creation of the White Sands Missile Test Range—there approximately the same picture is observed: maximum possible isolation of experts from the outside world combined with comfort within the zone. That was the fashion. It was thought that researchers work most productively when they are freed from everyday concerns and if they continuously socialize with each other during work and non-work time.

They say that the Gaidar Government, that consisted primarily of scientific associates of open economic institutions, knew practically nothing about the atomgrads and their difficulties. Therefore, they say, no one was involved with indexing the salaries or with the problems of supply. However, they didn't "forget" to repeal the special deliveries and to assign the task of supplying food to the nuclear workers to the nearest oblast cities in 1992. And we have already heard how they "resolved the problems" there. The Ministry of Medium Machine Building that watched over

the atomic empire has ceased to exist. The new department that inherited its functions was tortuously born over a long period of time. Yes and its capabilities are incommensurably far from those that the Ministry of Medium Machine Building had.

"Our minister went to the premier four times," said Russian Federation Ministry of Atomic Energy Directorate Chief Georgiy Kaurov, "but each time the conversation ended the same way: the government simply does not have any money. Finally the minister broke through to the president. The strictest order was obtained: allocate the money, the minister of finance will track it so that the money is not 'played with' on the way. That's how the social explosion was extinguished. But that is not the method... Do we really need to appeal to the president each time salaries are paid? The main thing that the people insist on is the development of a program in which the status of the atomic cities and their prospects would be clearly defined..."

Although the cities declassified themselves, the regime is being observed based upon inertia. It is a millstone for city residents, impeding the conversion processes and the commercial beginnings, yes and simply contacts with the outside world. A person outside the zone who finds himself in a difficult situation at least has the possibility of choosing. The atomic workers from the special city do not have that possibility. It's hard to imagine that a resident, say, of Trekhgornyy (Zlatoust-36) would find himself employment in nearby Yuryuzana. All Urals cities and villages—even entire opened cities—have traditionally been closed on themselves and on some kind of specific type of production. And what kind of way out did a former graduate of Moscow or Kazan Institute have? To leave for his homeland? But here is an apartment and an established way of life. But there—are long broken off ties and zero chances to obtain housing. A person who has found himself in a trap is capable of the most unexpected actions...

A man who refuses to give his name enters the conversation: "Primarily administrators are participating in this conversation. All of them are speaking correctly but that is only a tenth of the truth. Fear for their chairs compels them to smooth over the corners. I will reveal more: We have at our plant—in this case I have in mind Chelyabinsk-70—interests that I represent, people's fainting spells from hunger at work places have become common. The hospitals don't have medicines, we bring in all we can from nearby Kasly. Here the managers have talked a lot about the patriotism of the specialists who work at the atomic cities and about their unselfishness and devotion to the cause. I am a physicist by profession. In principle I know how to make a nuclear bomb from beginning to end. We have few people like me in Russia, approximately 200. But, you will agree, that is quite a lot. I would not begin to vouch for everyone..."

They initially recalled the atomgrads not at home but in the West when signs appeared that a drain of specialists to countries that are striving to possess nuclear weapons was possible. American congressmen visited the numbered cities one and one half years ago. Then Secretary of State James Baker arrived in Snezhinsk (Chelyabinsk-70) right after them. The senate expressed its readiness to allocate \$25 million for conversion of atomic production. Germany, Japan, Italy, France, and Great Britain endorsed that

project. The sum of the conversion fund was increased to \$100 million. However, due to disagreements the good intentions have also remained on paper. But then again, even realization of the project did not resolve the problems. Grants have been provided only to scientists. But the primary mass of the population of the atomgrads, as we already stated, are engineering and working people.

"I do not believe in any international assistance whatsoever," said Vladimir Belugin. All of these funds and similar organizations only create the visibility of the concern, actually divert us from our business, and introduce dissension and confusion. Russia, our own state, if it intends to think about safety, must finance us. Meanwhile, continuous improvement of weapons is occurring in all of the nuclear powers."

"Right now there are many conversations that the previously mentioned special program of scientific and social development is already being developed for you where it seems that a fundamental solution of painful issues is provided for.

"We heard about that program," Belugin began to laugh. "it is very interesting that there is not a single man from either the numbered cities or from Minatom [Ministry of Atomic Energy] on the team that's involved with it. The document will certainly turn out to be amusing..."

Of course, atomgrad residents and even the entire sector have rejected a strike—and its spirit continues to spin in the air—the light in our apartments will not be immediately extinguished and the water will not be shut off. "Randomness" in the production of warheads will not occur immediately. In any case, we would like to believe that. But we must see that the accumulation of a mass of social dissatisfaction is approaching the limit. The current situation, if real steps are not taken, will mandatorily strike—and very painfully—our already adequately complex lifestyle.

CIS: GROUND TROOPS

Development of 'Tank-Robot'

Moscow ARMIYA in Russian No 9, 93 (Signed to press 30 Apr 93) pp 21-24

[Article by Col. V. Sergeyev, candidate of technical sciences and instructor at the Military Academy for the Armored Forces, and Lt. Col. S. Babushkin, senior scientific associate: "Will Russia Have a Tank-Robot?"]

[Text] Three enthusiasts at the Military Academy of the Armored Forces developed a tank-robot over the course of several years. It is essential to the forces and can operate in extreme situations in which an ordinary tank and its crew will fail. Unfortunately, the vehicle that has already been tested in field conditions has not yet found an application. At the present time, there is not even a technical specialist who can service it. At the same time, in other countries work in this direction is in full swing. Just a few years ago, the Americans, for example, carried out full-scale tests of a tank-robot, which received the name "Demon." The small vehicle is intended for joint actions with tanks operating autonomously under a program loaded into the on-board computer.

In our country at the beginning of the 1980's, several research institutes and defense plants, including the Military Academy of the Armored Forces, began to deal seriously with the robotization of combat vehicles. Subsequently many refused to investigate this subject for different reasons, which will be discussed below. We in the academy continued the research. Important circumstances pushed us in this direction. Many armies of the world received anti-tank guided missiles that could destroy armored targets from a distance that is relatively safe for the crew. It is very difficult for a single tank to combat antitank guided missiles. But a platoon or company employing salvo fire could very well strafe such targets from a maximum range.

And this idea was made the basis of the automation of salvo fire in one of the departments of the academy. What is the essence of the innovation? A special control console was installed in the command tank. Auxiliary instruments and mechanisms were mounted in the remaining vehicles. The commander detected the target, aimed the gun, and pushed the button "Target Designation." The on-board computer instantaneously processed the data and sent a signal to the remaining tanks. After this all the guns were automatically aimed at the target and a salvo resulted. The probability of destruction of small targets was 0.9. It was an obvious success. But even then it was clear that the system itself can also resolve other tasks...

Thus, the system "fired" in battle but it was idle while moving. But it certainly could also control the movement of tank columns, thereby ensuring their high speed. A single tank can move quickly but when a subunit is on the move the speed drops off by 30 to 40 percent because of the inadequate training of drivers, dust, smoke, and obstacles on the way. In this case, the combat vehicles become relatively easy prey for antitank helicopters.

This gave rise to the so-called "aircraft" idea—to force the tanks to operate on autopilot. The first vehicle is guided by the most experienced driver and he determines the program for the autopilots.

They tested the idea in practice. The results exceeded all expectations. The speed of movement of the column of combat vehicles turned out to be 30 percent greater than usual. And the safety of driving increased along with the speed. For it is on account of the inexperience of the soldiers that the vehicles frequently collide and people are killed or maimed. Something like this happened to one of our comrades. Under conditions of poor visibility, a young driver miscalculated his speed and ran into his tank on a turn. There were no victims simply because literally a minute before that he went down through the turret hatch and was not crushed by the gun.

It was then necessary to equip 10 tanks with our system of automatic fire and movement, carry out complete testing on the range, correlate the data, and prepare the necessary documentation. After this it was possible to make a recommendation to the appropriate authorities that our product be accepted for series production. But before then it was necessary to resolve many scientific and structural tasks of various levels of difficulty. The work was greatly curbed, however, by the lack of a production base at the academy.

Maj. V. Utkin and other specialists either took the components out of old equipment or ordered them at various plants. After that they assembled the necessary units and systems.

It was especially difficult to manufacture electronic devices. All of those in our group literally had to go to school. We began to attend courses for the training of electronic specialists at one of the Moscow VUZ's. The knowledge acquired there permitted us to assemble an electronic system for the control of the mechanisms of the robot on the basis of an on-board computer.

But the more the drawings and calculations turned into real systems and units, the more difficult it was to resolve financial questions. Many parts and instruments were required that could only be purchased. This is where one large machine-building research institute unexpectedly helped us out. There they had long dealt with the problem of the movement of heavy vehicles at maximum speed. Specialists from this scientific institution visited the laboratory, studied in detail the system for the control of the movement of the tank-robot, and gave it a positive assessment. The institute transferred 200,000 rubles to the academy for the right to use our results. That was a significant sum at that time, which allowed us to conclude the manufacture and testing of the tank-robot in 1987.

The demonstration took place at a relatively small site not far from the laboratory. The first time, however, we did not risk putting the vehicle under "operating conditions." The hardware was new and, as they say, the gear wheels had not yet been worn in. What if the 40-tonne colossus suddenly fails to obey the on-board computer and heads across the territory of the academy, crushing everything in its path? For this reason, they began to control the tank from a movable console. The vehicle performed all of the commands flawlessly and maneuvered on a relatively small spot. After that we began to prepare for range testing. It was still necessary to perfect several units and fully equip the command tank.

During this time the leadership of the academy gave us substantial support. Several specialists came to help the group from other laboratories. They worked 12 to 14 hours a day and there were no days off or holidays. In a year they prepared the basic programs for the on-board computer. They installed all of the necessary systems in the command tank for the remote control of the tank-robot. In so doing, the tank-robot itself became a conventional combat vehicle depending on the situation. While in movement the driver could go directly from automatic to manual control. In this way, we greatly improved the combat possibilities of an ordinary series vehicle.

By the way, analogous investigations in this area were picking up speed in foreign countries as well. Thus, during this period at the army test range White Sands in the United States, they tested an automatic system that permits the control of a subunit made up of 12 tanks without crews. The computer received data from the navigation instruments of the vehicles, compared them with the programmed data, developed correcting commands, and by radio transmitted them automatically to the actuating drives that regulated the flow of fuel and controlled the mechanisms for turning and

braking. In so doing, they achieved a maximum speed of movement of 20 km an hour. But our tanks could move much faster.

Range testing took place in June 1988. For several weeks the tank-robot and command vehicle completed marches, overcame various obstacles, and moved across areas without roads and forests. Of course there were breakdowns in the guidance system and individual mechanisms failed. We corrected the defects, continued the tests, and improved the programs for the on-board computer. Through tedious work we revealed bottlenecks. For example, the electronics was insufficiently resistant to large overloads. But this did not bother us. After the test range, we became firmly convinced that we were on the right path. But barriers arose that we had previously not even thought about.

As we developed our tank-robot, the interrelationships between our group and other laboratory workers became worse and worse. Unfortunately some people became jealous. They began to accuse us of not participating in perestroika and of wasting the people's money. Of course eventually "well-intentioned persons" also showed up who proposed talking with us within the structure of the party. But praise God, as they say, sane people were found who did not allow this spectacle with a meeting of the party committee to be carried out in full.

In the end, the two authors of this material and Maj. V. Utkin had to write reports with the request that we be moved from scientific positions to teaching work. And it is unknown what our further fate would have been if the head of the academy had not intervened. He moved the entire group to another department and set the task of robotizing the armament of the tank. We were accepted very well in the department. They gave us a place to work and assigned a specialist on armament to the group. Once again we picked up the work with great enthusiasm. The result was that within a year we obtained a real tank-robot. At the test range, it went to the firing position without a crew, aimed the gun at the target, fired at it using a regular combat round, and destroyed it. After that, it was equally successful in finding and destroying a machinegun position, after which it went over to the attack and, covering with itself the following command tank, opened fire with the gun and machine gun. The tank-robot was guided by an operator located in the turret of the command tank.

Despite the success, nevertheless, we were still just a temporary scientific group. And so it has been for five whole years. On a temporary basis we are working on a most complex problem with which high-power scientific teams in other countries of the world have been dealing for a long time. Every year the group is threatened with breaking up if the corresponding order is not signed by the academy. We have now been put under conditions where we are still forced to prove the competence of the group to preserve it. We are now in the process of perfecting the tank-robot and there can be no talk of instant results, because basically we are not making any new discoveries in this area. For this reason, we must deal not only with the basic subject but with others as well.

Thus, we have built a unit for the switching of the engine cylinders. When the tank is in defense, about 150 amperes are needed for the work of the weapon stabilizer. If the

power is provided by on-board storage batteries, they are good for only four hours. So that they will not fail, it is necessary to get the electric power from a generator. This system is put into operation using a working tank engine. And the 12 cylinders, which consume a large amount of diesel fuel, turn just one generator. The new device periodically switches on three cylinders. Extra power is taken from the engine. Its capacity is doubled. In addition, the reduction of the heat emission from the working engine improves camouflage. It is now possible with the help of imaging infrared sensors to determine with great accuracy the coordinates of armored vehicles with working engines. One of the defense plants of the branch research institute assessed our invention highly.

Therefore, do not accuse us of immodesty, for our work speaks for itself. It has long since become necessary for the academy to have a special laboratory for robotization. The head of the academy also supports this idea. He raised this question before the commander in chief of the Ground Forces, who gave his consent. Only permission was given to establish the laboratory using the resources and personnel of the academy itself. But where can we get these means? Therefore our group, which had obtained perceptible results in a certain stage, began to yield its position and the tank-robot once again remained just a laboratory model with no present pretensions for series production. In other countries and armies, they understood the importance of robotization and actively incorporated it in their hardware.

On the French tank "Leclerc" and the German "Leopard-2," for example, they have already installed systems for the remote control of movement. It should be noted that this makes it possible to avoid mistakes in bringing combat vehicles across rivers under water and raises the safety of the crews. In our units, after all, there have been a number of cases when the drivers lost their way and the tanks went along the channel and fell into deep holes or went over a cliff instead of approaching a gently sloping bank. But foreign crews cross on rubber boats, whereby they remotely guide their vehicles.

The experience of the Great Patriotic War and local conflicts shows that it frequently happens after the loss of the crew that the combat vehicle is still quite functional but remains frozen on the battlefield. In such cases, the tank, armored vehicle, or carrier vehicle becomes an excellent target. With the help of remote control, it is possible to remove them from the danger zone in time. It is just too bad that there is not such a system in Russian tanks now. Is this not one of the reasons why instead of purchasing our tank, which is excellent in many areas, at auctions in Abu Dhabi some states bought the heavier French tank, which, to be sure, is equipped with advanced robotics? At the same time, in the opinion of many specialists, our system is quite able to compete with foreign models. Tests on the range have shown its high effectiveness. The commander of one tank regiment was immediately able to guide our robot along a rather complicated trail with the help of a control console without preliminary training. An experienced specialist commented on remote control with enthusiasm. He noted that the armored forces have long been in need of it.

Artillery personnel and assault troops have a need for robotic systems. In the airborne troops, for example, it frequently happens that the crews engaged in an airborne

assault separate from airborne combat vehicles cannot find their vehicles for a long time, especially at night. The idea arose of sending a signal to the vehicles, whereby they will find the crews themselves. A certain amount of research has been done on this subject but it was terminated for a number of reasons.

Moreover robots certainly can become ideal simulators to train drivers. This is currently an expensive and labor-intensive process. The running gear or engine frequently breaks down because of the incompetent actions of soldiers and much time and money are spent on repairs. Our tank-robot used as a "teacher" permits the soldier to acquire the skills of a specialist second class in just 10 days.

We carried out an experiment in one of the subunits. Here all of the drivers had completed training subunits and had the third class. They were put into two groups. One of them worked on a robot and the other on a conventional vehicle. The people went on details and guard duty and improved their skills. But those in the first group were trained by the robot. At first the soldiers were unaccustomed to the fact that the control levers and pedals moved independently of their will. The smart robot, guiding the tank along the trail, taught them its own skills. Gradually they learned how to handle a tank under different conditions. After just 10 days, the soldiers were very well able to travel along a complex trail by themselves. The second group was still far from this point. Subsequently all of our disciples from the first group became sergeants or instructors and were assigned the most responsible combat training tasks in the regiment. Only this is not the basic objective of our tank-robot. The main thing for it is to act without a crew under extreme conditions in which it is practically impossible for a human being to survive.

Persistent labor is always rewarded, as they say. Recently several scientific-technical committees of the Russian Armed Forces have become interested in our work. In previous years, for example, the scientific-technical committee of the Ground Forces actively dealt with the robotization of combat vehicles. Particular defense plants were given tasks, money was transferred to them, and they achieved some results. But they lost contact with one enterprise because after the collapse of the Union it was in a neighboring state outside of the ruble zone. At another huge tank enterprise, the promising topic was terminated, to put it mildly, by ill-conceived conversion and the lack of funds on account of rapid inflation. Some workers of the scientific-technical committee of the Ground Forces are now asserting that at this time in our army only the Military Academy of the Armored Forces has a real operable tank-robot. For this reason, it is planned to utilize all further industrial developments in the robotization of tank systems on our vehicle. This is advantageous to the research institutes and to the plants. Previously they installed their systems and instruments in their own armored vehicles. It was necessary to build and assemble various actuating and secondary units, mechanisms, and electronics.... They have now been given a ready tank-robot with an on-board computer, which is linked with many systems.

We are seeing more scientific associates from different organizations. They make copies of technical documentation, study some technical decisions in detail, and investigate the tank-robot and guiding command vehicle. We are

glad to help. Possibly our labor will help our colleagues to find the proper solutions and to build a more consummate combat vehicle. But still, it is vexing to realize that the temporary scientific group may be disbanded and others will benefit from all of our results and success. Of course we could not finish the work ourselves. Three temporary workers could not fully handle the colossal volume of scientific and design tasks and the day-to-day problems. Right now the work in the academy on the tank-robot is practically at a standstill. The tremendous possibilities of an already prepared robotized system are being utilized only in part.

Why did this happen and why could we not bring the project to a logical conclusion?

In my view, the unhappy story of our temporary group and the subject on which we worked for about eight years happened because of the irrational organization of military-scientific work at the academy. In numerous departments and laboratories, scientists frequently deal with narrow technical problems. Many colleagues set for themselves the goal of inventing some device or instrument and then writing a scientific work or dissertation. It frequently turns out that such scientific endeavors are of no use to anyone other than the authors.

We believe that it is time to put an end to such a practice. The priority in scientific work at military educational institutions must be given to more promising subjects and it is necessary to concentrate the efforts of scientists and financial resources on their development.

But today one can only regret that five years ago our army could have received a powerful and intelligent vehicle. For the time being, the robot and command tank are gradually getting covered with dust and rust in a room at one of the remote garrisons.

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Problems Facing Motor-Rifle Division Based in Georgia

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[Article by Lt. Col. Sergey Dyshev: "Division with Packed Bags"]

[Text] At one time these lands were the cause of discord. Akhalkalaki, a city in southern Georgia with a history going back almost a thousand years, was once a part of Turkey. Turkey then lost it, yielding to the pressure of Russian bayonets, and later regained it under a peace treaty. Finally, in 1828, after a rapid campaign by Count General-Field Marshal Ivan Paskevich, the city was captured and the next year definitively annexed to Russia. The Turkmanchayskiy Treaty guaranteed to the peoples of Georgia, Armenia, and Azerbaijan the long-awaited peace and prosperity after centuries of bloody conflicts and invasions. On the orders of the Caucasian governor Paskevich, Akhalkalaki was turned over to Armenian refugees for settlement. Today they live here compactly and only the ruins of the old Turkish fortress remind them of times past....

A Cossack regiment was located in the city prior to the revolution. And a motorized rifle division was quartered here about 40 years ago. It is still here today, on the front

lines, performing those same operational-tactical tasks in this sector. I got sidetracked, however, and I am trying to present what is desired as reality. It is the same division at the same place under the Russian flag but it ended up in the territory of a foreign state without any rapid marches being undertaken. In short, this is all very well known and here it is appropriate to speak not of front lines but about a situation that is more reminiscent of an encirclement. For it is a rare day when you don't get hit furtively or openly.

One day leaflets appeared in the city. Pasted on prominent places, they called on the citizens of the town not to dissolve the division, to show respect to the servicemen, and to maintain their traditional good neighborly relations. Exceptional circumstances induced the command to take this rather unusual step. Posts have recently been fired upon and officers have openly been blackmailed, being offered money in exchange for weapons. The men of the city shrugged their shoulders, saying that all of this is being done by outside militants and that they themselves have only good sentiments. And there really was not much that they could do. Caught up in war, the Caucasus lived under the laws of war, which, like an all-consuming Moloch, was demanding more and more new arms.

Today the division in Akhalkalaka is not only a restraining factor in this region but also, if one can put it this way, a social and economic guarantor of the stability of the city and the entire vicinity. Maj. Spartak Shakhiazaryan, who was born and grew up here, said that most of the producers in the city have shut down, while the rest are utilizing only part of their capacities. A plant for cableways, the only such enterprise in the former Union, has closed: there are no basic materials and the specialists have left. What is the population doing to survive? They are engaged in commerce. They go to Armenia, Russia, Turkey, and Tbilisi, from where they bring in goods. The main buyer is the division. The average wage of employees in the city is about 5-10,000 kups. That is paltry. By the way, the Russian combined unit provides jobs to about 5,000 people in the local population, most of whom are people in extended service and employees.

"The division will leave, for they will die of hunger." These are the words that I heard from many.

"Several years ago, my comrade opened a 'commission shop' and lived like a king," said Shakhiazaryan, "but today he envies me: here his business does not yield as much profit as I get monthly, and that is 123,000 plus rations."

Yes, the military people are paid rather well here, considering all the coefficients and the high altitude of 1,800 meters above sea level. But their service is worth this money. The climate here is moderate, somewhat reminiscent of the central zone of Russia. But in winter the temperature drops to near 40 degrees below zero and the winds are cold and penetrating. During these savage months our servicemen are cut off from Russia in every sense of the word. And perhaps the most difficult thing is that there was no electric power from December through April. The officers remember this time as an agonizing nightmare. There were no newspapers, letters, radio, and certainly no television. The school was not operating. Many of the wives of the military personnel were forced to leave for Russia, not only because of the lack of products and heat but also

because of the instability in Georgia. Only a few women remained and I am sorry to say that I did not meet with them, because I did not want to plunge again into that abyss of despair, bitterness, and hopelessness that lies fully only on the shoulders of the women.

The officers have problems of their own: there is a shortage of people. Therefore they themselves have to do guard duty and sometimes take a rag and bucket and roll up their sleeves to wash the floors in their subunit. Where can they go? They go on missions in search of replacements and volunteers. You understand that the contingent is not always the best: What commander wants to give up a good soldier? True, they cannot get over their joy at receiving the latest replacements from the training unit of Leningrad Military District: they trained some good specialists. They are also getting people under contract. These are diverse people of different ages, many of whom have been dealt with harshly by fate. Some of them are heavy drinkers and have been discarded to the margins of life, like froth after our stormy and absurd economic reforms. Many of them have to be discharged, whereas the rest are the main hope of the commanders in these hard and unpredictable times.

By the way, there is a shortage of officers too. Only 20 percent of the platoon leaders and 60 percent of the company commanders are available in comparison with the prescribed strength level. Several battalion commanders are missing. For some reason these posts are not in great demand, although there is every opportunity here for growth of young officers.

What awaits the division in the near future? So far there have been no official decisions in this respect. But everyone remembers the sad example of the disbanded 10th Division in Akhalsikhe. A witness and participant in those events is the deputy division commander Col. Aleksandr Petrachev, who served in the special forces in Afghanistan. He dispassionately told me this story:

After the corresponding intergovernmental decision, they began the agonizing process of moving the arms, equipment, and property of the division. No, here we are not talking about the moral side of the matter, although naturally no protocol will reflect all of the bitterness, hopelessness, and sense of humiliation that was experienced by the officers who surrendered their regiments and battalion—perhaps not to the enemy and perhaps not without a fight but officially. For each of them, their own unit was a family and a small piece of home with comrades in arms and its own history and pride....

As for the material aspects, from the very beginning the Georgian side set extremely harsh conditions: turn over equipment and arms in full strength with all accessories, spare parts, etc. And this is in our time! But the most horrible thing was when the open derision of the families began. Armed people burst into the apartments and gave the ultimatum: "Move out of the apartment within two hours!" They tried to protest to the Ministry of Defense of Georgia but it was not in control of the situation. By decision of the assembly of officers they stopped the process of turning over the division four times. The removal of the families was quite an undertaking and most of the property had to be discarded. They could take with them only what was most essential. Initially the columns moved without a guard but

later it was necessary to escort them with military vehicles. The columns were stopped and robbed by motley groups of young thugs in military uniform, who in the best of cases demanded the payment of a "tax" in the amount of 5-10,000 rubles or even more, if they were so inspired. They made them pour out fuel, showing no concern about whether the women and children would reach Russia. In Tskhinvali, there was absolutely open marauding: if you got separately from the column even a little or turned where you were not supposed to be, they would rob you down to the last thread. They took the vehicle of regiment commander Lt. Col. Velichkin by force, leaving him only the sports clothes that he was wearing.

"I did not see anything like that in Afghanistan," Petrachev recalled somberly. "When we left, we assembled the elders in the region of Girishka. We reached an agreement and left without a shot being fired. But here I led 20 columns out and every time something happened. They tried to take us hostage to exchange us for weapons. Any youngster can put on a uniform and take a gun.... The rascal knows that there is a woman and child in the vehicle and that we are afraid to shoot. When we left Afghanistan, we even had sheets and pillow cases in the modules for the 'Afghan' soldiers. And here too we said: 'These are our brothers, let us do everything honorably!' We turned over fully equipped domestic facilities, right down to the irons.... And the way that they evicted the last 15 families! They were practically thrown out on the street! Deputy Georgian Minister of Defense Gurginidze tried to arrest me.... Although it must be said that most of the Georgian officers meant us well."

At the place of the 10th Division is now a Georgian brigade under the command of Colonel Apchkhireli, a former Soviet officer. And the combat equipment, in violation of all agreements, was left near Sukhumi....

In today's hard times, the gaze of the Armenian population of the region is directed toward Russian military personnel. They are the force on which they are hoping in the event that the conflagration of war spreads and flares up in these remote places as well. Although it has practically no rights, the division nevertheless remains the only stable force. The authority structures of the city are not working. A convincing example is the public execution of a 16-year-old boy who raped and killed a nine-year-old girl. The crowd demanded that the criminal be turned over to it and, after getting hold of him, they finished him off in a manner that is perhaps no less monstrous. The body lay for half a day next to the old fortress. The morals are becoming more and more savage.

The local inhabitants who serve in the division as warrant officers and in extended military service are seriously thinking about leaving with the division if a decision is made on its withdrawal.

Official Georgian circles are worried about how, in a manner of speaking, Armenian elements are stirring up rumors about the possible capture of the division by the local populace. Of course this entire game is being played in just one direction: to resolve the question of the transfer of the division to the Georgian side. Clearly there is no need to remind you where these forces will be employed.

But for the time being the division is protecting itself and even trying to engage in some combat training. The division

commander Maj. Gen. Yuriy Kovalenko told not without satisfaction how they were able to carry out training sessions with various categories of commanders. They assembled platoon leaders and during that time their company commanders went on guard duty. You should have seen how the eyes of the general lit up when he told of the joy that the officers had sitting behind the controls of tanks and performing firing exercises. And he himself did not fail to test his own skills.

What else? The lieutenants come and they are met and given the keys to their apartments. But hardly do they cross the threshold when they say: "We were deceived. They sent us here and then they said: when you get to the division you will be discharged." There were people from the Higher Combined-Arms Command School in Moscow and the tank school in Chelyabinsk. And their own people were discharged. Then this wave passed and the ones who remained were the most dependable and tested people, who will be with the division to the end. One of them is Maj. Elgudza Tatalashvili, who is convinced that in the Russian Army he will do more good for Georgia than in the Georgian Army, because the Russian Army is now defending the southern border and performing its potential role in the Middle Eastern theater of military operations. And the interests of Georgia and Russia coincide here.

Yes, the indefiniteness of the situation is a headache for the servicemen, 60 percent of whom, by the way, do not have housing in Russia. And one senses, using a well-known Russian expression, that "their bags are packed." Still, here you do not see desolation or decay. The exemplary military post is still exemplary today; it is clean everywhere and the officers' house is comfortable. Their own bakery and bath and laundry combine are in operation. They have established a unique complex that includes a dairy, a smoke-house, a small bazaar, and a cafe. They have also resolved the problem of electric power and now they will have their own independent source.

"We must get through this time," said Colonel Petrachev with conviction. "If we relinquish our weapons, the Caucasus will choke in blood. The most steadfast people have remained with us. Those who wanted to be discharged were discharged. Each of our officers has a solid character and self-sacrifice is an element in each of their souls. An American or some other soldier would hardly stand up to these hard times.... They changed our ideology but we continue to serve. And believe me, it is not for the ruble...."

And they are serving. The officers of the surface-to-air missile regiment are probably the last people in Georgia who are defending the air borders. Every other day they go on duty, forgetting about their personal lives, rest, and cozy homes. They guard depots with weapons and equipment as ordinary soldiers. Is it possible that the historical memory is so strong because these lands have been generously bathed in Russian blood? Possibly. But it is also so that each of them understands that there is no one else to perform this difficult work that is not yet appreciated as it should be.

CIS: AIR, AIR DEFENSE FORCES

Development, Future of VTOL Yak-141

93UM0748A Moscow *TEKHNIKA-MOLODEZHI*
in Russian No 4, Apr 93 (signed to press 12 Mar 93)
pp 31-34

[Article by Chief Designer Sergey Yakovlev and Deputy Chief Designer Konstantin Popovich under rubric "Military Knowledge": "Vertical Takeoff"]

[Text] *At the Le Bourget Air Show the new Soviet Yak-141 (Yak-41) VTOL combat aircraft in which 12 world records were set in 1991 received a high assessment from specialists and visitors. "Analogues for the new fighter, which NATO has codenamed 'Freestyle,' hardly will be found," wrote the German journal FLUGREVUE at that time. "Despite the fact that for now we have limited information about it, there can be no doubt that in all respects this aircraft now is the most effective vertical takeoff fighter in the world..." Two years have gone by since then.*

Possibly one of the TEKHNIKA-MOLODEZHI readers will recall the 1961 Tushino air holiday, when a "flying table"—such a strange, wingless design with four long legs and a vertical turbojet engine in the center—took off smoothly above the airfield and hovered at a height of 10 m next to the pilot. For the viewers it was an effective trick, but for the specialists it was the conclusion of what was officially called research into problems of flying aircraft in a hover mode using a so-called jet control system...

These problems also were being worked on abroad at that time, and the British were the most successful. Having successfully tested their own "table" or "thrust measurement bed," as they put it, in October 1958, the firm of Shorts fabricated the SC-1 monoplane. It was equipped with four special turbojet lift engines installed with nozzles downward, creating a vertical thrust which separated the craft from the ground; a fifth engine in the tail served for level flight.

Although considered strictly experimental, in contrast to the exotic takeoff platforms the SC-1 was a conventional aircraft with fuselage, wing, tail assembly and landing gear. Its flights convinced the British of prospects for such aircraft. By 1960 the firm of Hawker had prepared six P.1127 test aircraft, which became the prototype for the world's first Harrier VTOL combat aircraft.

As had happened often before, on learning of the foreign innovation, we suddenly thought about something we had overlooked and rushed in pursuit of the "probable enemy." The Special Design Bureau directed by A. S. Yakovlev received an assignment to fabricate a similar aircraft. Of course, a minimum time period (4-5 years) was set; moreover, it was set with no opportunity given to order a suitable engine. There could be no thought of a special one similar to that of the British, as creating it would take 7-10 years. Therefore two series R-27 engines developed in the S. K. Tumanskiy Special Design Bureau were put in the first domestic VTOL. Movable nozzles were designed and made for them which permitted the thrust vector to be turned smoothly from horizontal to vertical and back.

That approach also determined the configuration: since in a vertical takeoff and landing the power plant thrust vector had to pass through the aircraft's center of gravity, the engine was accommodated in a planing-step scheme—in the nose so the rotating nozzles were beneath the wing near this center. The design's novelty demanded unique laboratory research. For example, when the first model of the aircraft with operating engines... was tested in the Central Aero-Hydrodynamics Institute wind tunnel.

In the hover mode (this term was borrowed from the helicopter people) and at low speeds the aircraft was controlled by releasing compressed air bled from the engine compressor through the jet nozzles. The nose nozzle was moved forward on a long beam. The planing-step configuration and nose attitude jet (that is what jet nozzles began to be called) gave "Object V," or the Yak-36, a unique appearance.

Ground tests began in 1962. First and foremost, a bed was designed and built on which the Yak-36 was fixed at heights up to 5 m. Thus, without risking either pilot or aircraft, we looked for engineering solutions to help reduce the harmful effect of red-hot gases on the airframe and power plant. The Yak-36 was rolled out onto the test airfield in January 1963.

First it was taught to separate from the concrete runway, and we ourselves learned to control such an unusual aircraft. The hover mode turned out to be the most dangerous, and so it was necessary to gain altitude as quickly as possible. Something else was learned—if the automatic equipment should malfunction during vertical takeoff or landing, the Yak also could be controlled manually. In general, much had to be done for the first time in invading the unknown. How can one not help but pay due respect to pilots V. G. Mukhin (from the Special Design Bureau) and Yu. A. Garnayev (from the Flight Research Institute), who in just nine months "led" the Yak-36 through a full-profile test program from hovers to flight, including vertical takeoff, level flight and vertical landing. The culmination was a demonstration of the new aircraft by Mukhin (who became a Hero of the Soviet Union) at the Domodedovo air holiday in 1967. Its model now can be seen at the permanent aircraft exhibition in Monino.

Like the Shorts aircraft, the Yak-36 also was experimental. After this, in the late 1960's the Special Design Bureau began work on a VTOL aircraft for the Navy, designated the Yak-36M (by which the affiliation was emphasized) or "Object VM." But due to the fact that the Yak-36 power plant did not develop the vertical thrust necessary for a combat aircraft, we used a combination of a lift-cruise engine (with rotating nozzles) and two lift engines on the new one. The latter were shut down after transition to level flight and were started prior to landing.

Yak-41 VTOL Aircraft

Length, m	18.3
Height, m	5
Wingspan, m	10.1
Wing area, m ²	31.7
Power plant	R-79 lift-cruise engine with 15,500 kg thrust, two RD-41 lift engines, each with 4,100 kg thrust
Speed, km/hr:	
Near ground	1,250
At 11,000 m	1,600
Service ceiling, m	15,000
Range, km, with vertical takeoff without load:	
Near ground	650
At 10,000-12,000 m	1,400
With 120 m takeoff run and 1 tonne load:	
Near ground	1,010
At 10,000-12,000 m	2,100
Combat radius with 120 m takeoff run and 2 tonne load, km	690
Loiter time 100 km from base, min	90
Load, kg:	
With vertical takeoff	1,000
With short takeoff	2,600
Takeoff weight, kg:	
With vertical takeoff	15,800
With short takeoff	19,500

It would appear that dragging a pair of rather heavy nonoperating engines all over the place was disadvantageous, but calculations showed such a power plant to be optimal for subsonic aircraft, which foreign researchers also confirmed.

But, if you please, what about the Harrier? Why did the British undertake a difficult, costly development of a special unified engine for it even though they had lift engines that had been tested in the air?

Let us recall the old truth: creation of any aircraft represents a continuous search for compromises among many and sometimes mutually exclusive demands on it. And most often the deciding role is played by time periods set by the client and the funds he has allocated. The important thing for creators of the Harrier involved its operation—one engine costs less and is simpler to service than three, although its design and fabrication were not inexpensive.

The first Yak-36M took off from a conventional takeoff run in January 1971, but its vertical takeoff tests began just eight months later. A circumstance of no small importance had to be taken into account: if any engine failed during takeoff or transition to level flight, the aircraft might overturn and the pilot would not have enough time to eject. Therefore they created an automatic survival system, which proved so successful that series VTOL aircraft also were outfitted with it.

On 20 March 1972 Special Design Bureau pilot M. Deksbakh made a full-profile flight in the Yak-36M for the first

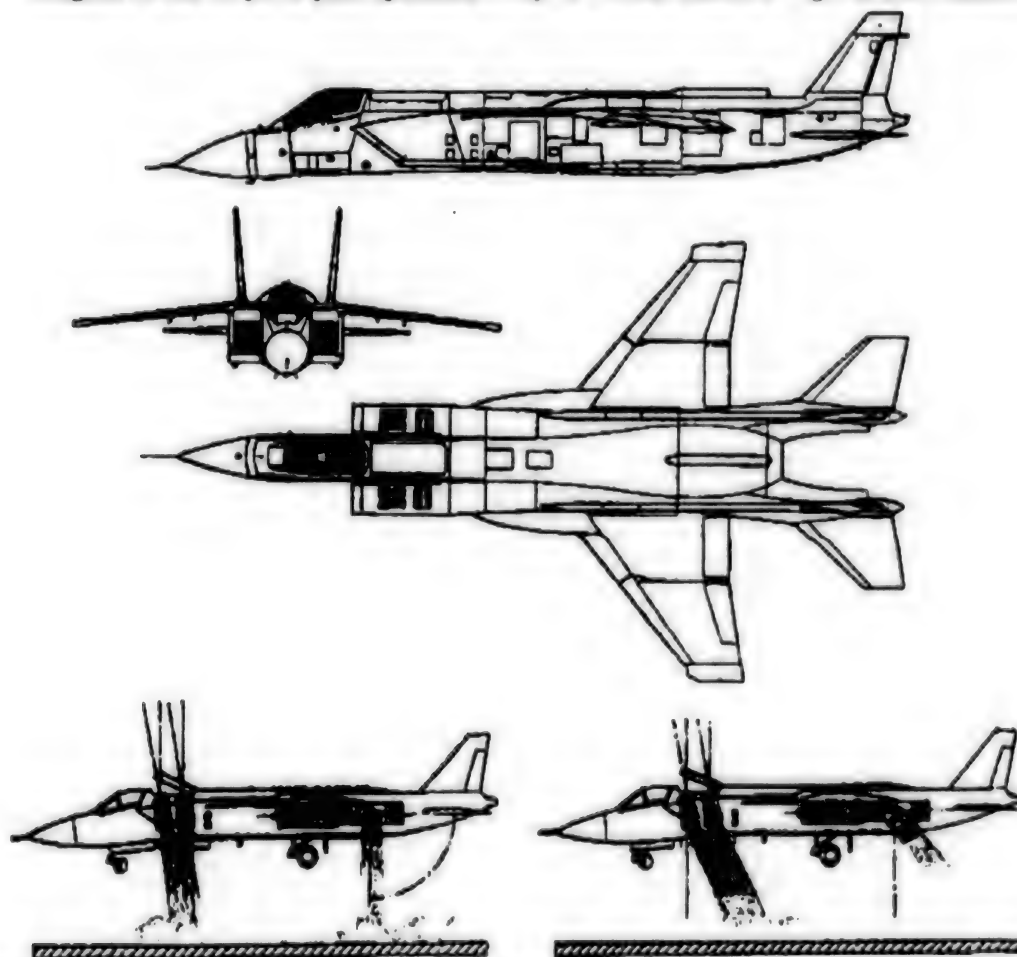
time, and in September he landed on the deck of the ASW cruiser Moskva (Deksbakh was awarded a Gold Star).

In parallel with the tests, the Saratov Aircraft Plant was preparing for series production of the aircraft and Nikolayev shipbuilders were building air-capable cruisers. The Yak-36M, redesignated the Yak-38, became operational with Naval Aviation in 1976.

But associates of the Special Design Bureau's predesign bureau already were working on the Yak-41 VTOL aircraft. Again they were solving the latest problems, connected first and foremost with creation of a powerful power plant which, equipped with an afterburner loop, would give the aircraft supersonic speed. By the way, they had not succeeded in giving the Harrier engine an afterburning mode because the four rotatable nozzles situated along the fuselage sides were short and the aerodynamic drag of the entire aircraft was too large. But the Yak-38's combination power plant seemed to us more promising, if it were equipped, of course, with rotatable nozzles with afterburners. And so, counting on the engine makers, we chose it for the Yak-41, which was to combine properties of supersonic and VTOL aircraft.

Such aircraft in the inventory of the Air Force and Air Defense would take off directly from shelters without taxiing out to the runway as usual for a takeoff run, or they would take off from several "point" pads—then several regiments would lift off simultaneously in an alert. In

Diagram of Yak-41 power plant operation: on left in vertical takeoff, on right in short takeoff



addition, if necessary the Yak-41 also could use a bomb-damaged airfield. Finally, the new Yaks would be based not only on large air-capable cruisers, but also on ships and vessels which did not have spacious flight decks.

In short, with the Yak-41's appearance nothing hampered creating a flexible, mobile defensive system which would allow the country's combat potential to be preserved even after a surprise mass attack—not like what happened in Soviet border areas on the morning of 22 June 1941, at Egyptian airfields in 1965 or in the Persian Gulf in 1991...

Just what is the Yak-41? In terms of aerodynamic configuration, it is a high-wing monoplane with a twin-fin tail on tail booms and a tapered wing. Its leading edge sweep is 45° and its dimensions and profile were chosen figuring that it would be operated in several modes: vertical takeoff and landing, lengthy cruising flight and flight at supersonic speed, and also maneuverable air-to-air combat. The wing folds before descending to the ship's hangar deck so the aircraft becomes more compact. The ailerons are connected with two attitude jets located at the wingtips. Compressed air is supplied to them from the lift-cruise engine compressor.

A third attitude jet is in the forward fuselage. The pilot cockpit has the usual systems for aircraft and weapon control and for flying in a hover mode and the mode of transition to level flight. We will note that power plant operation is regulated by electro-remote gear backed up by reserve hydromechanical gear. The pilot seat is ejectable and, as we already emphasized, pilot survival is guaranteed with any attitude of the aircraft in distress.

The Yak's equipment—and in addition to control systems this also includes a multifunctional radar, onboard computer, radar countermeasures system, inertial navigation system and much more—is distributed in three compartments in the forward fuselage, between the air intakes, and in the tail booms.

Two RD-41 turbojet lift engines, each with a thrust of 4,100 kg, are installed at a 10° angle in a special compartment right behind the cockpit. They were created at the Rybinsk Engine Building Design Bureau under the direction of General Designer A. S. Novikov.

The lower fuselage contains two pairs of transverse movable and longitudinal fixed flaps, which serve to facilitate vertical takeoff. And in its rear is the R-79 15,500 kg thrust

lift-cruise engine developed by specialists of the Moscow Soyuz NPO headed by General Designer V. K. Kobchenko. The engine nozzle is located between the tail booms and equipped with a door. For vertical takeoff (and landing) it rotates 90°, directing the stream of exhaust gases straight downward, but in a short takeoff it rotates only 65°. After the Yak makes the transition to level flight, the door returns to the initial position automatically or after the pilot moves a switch on the control column.

The armament complex of the VTOL aircraft includes various aerial bombs, guided missiles and free-flight rockets which are attached to external underwing stations before a sortie. In addition, the aircraft has a built-in 30-mm gun.

That—in general outline, of course—is the new domestic multipurpose VTOL aircraft. For now we have produced only four Yak-41's: one for static tests, another for working on vertical takeoff, the hover mode and the mode of transition to normal flight on the bed, and two for flight tests. It was in the fourth experimental model that Special Design Bureau chief pilot A. Sinitsyn set 12 world records in April 1991. In our opinion, this attests to the rather high flight performance of the VTOL aircraft.

But now it is hard to predict what will happen with the Yak-41. Unfortunately, financing for its program was stopped immediately after the Russian government sharply cut expenditures for defense needs...

But we still are hoping for the best, we are working, we are looking for options to upgrade the VTOL aircraft and we are trying to project in what way military and civilian VTOL aviation, which is unquestionably promising, will begin to develop. We can do nothing else for now.

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CIS: NAVAL FORCES

Navy Lacks Funds to Scrap Decommissioned Nuclear Submarines

93WN0519A Moscow IZVESTIYA in Russian 9 Jul 93 p 6

[Article by Viktor Litovkin: "Ninety-Three Nuclear-Powered Submarines Await Salvaging in Russia, But the State Has No Money for This"]

[Text] According to data available to the editor's office Russia possesses 235 ships and vessels with nuclear propulsion units. Of them, 228 belong to military seamen and seven belong to civilian seamen (394 nuclear reactors in the navy and 13 reactors aboard icebreakers—60 percent of the world total). Each year up to 20,000 cubic meters of liquid radioactive wastes and up to 6,000 tonnes of solid wastes are formed during operation of nuclear-powered submarines and vessels equipped with nuclear propulsion units.

In addition six to eight submarines are retired from the navy's fleet forces every year. As many as 93 have already been retired. Prior to the year 2000 over 150 nuclear-powered submarines will be "demobilized" in the course of fulfilling the START-2 Treaty and due to age. In the meantime not more than two are salvaged each year. Moreover the navy doesn't have enough money for this.

Given this rate, we will need 50-70 years and we will have to spend many billions to salvage a hundred and a half

nuclear-powered submarines. Maintaining just a single retired submarine now costs 5 million rubles in 1992 prices, while stripping one down at the Severodvinsk Zvezdochka Plant costs R800 million.

Late last year the Russian government appropriated R5.8 billion for the salvaging of nuclear-powered submarines, but the military received only 10 percent of this amount, and even that was not indexed to tenfold growth of inflation.

"Salvaging nuclear-powered submarines equipped with nuclear reactors that have served their full useful life, and liquid and solid radioactive wastes is a very expensive problem," I was told by Vice Admiral Viktor Topilin, chief of the navy's Main Directorate for Operation and Repair. "According to the law on environmental protection, we are prohibited from sinking solid radioactive wastes, which is something we used to do until 1992. Our storage facilities—two in the North and two in the Far East—are practically 100 percent full, and there is nowhere to put the spent fuel."

The admiral believes that Russia acted very short-sightedly when it signed the London and Paris convention on these issues, and it lost a great deal from this. England and France are able to dump liquid radioactive wastes until the year 2018 according to this convention, assuming that the necessary norms are observed, while Russia cannot. But it has nowhere to put them. Whatever the case, it will end up having to dump liquid radioactive wastes and sink solid radioactive wastes—at least ones that are weakly radioactive.

The "White Book" published by the Ecology Committee of the Russian Supreme Soviet cites data on all violations of IAEA nature protection requirements by military and civilian seamen. Most nuclear waste burial areas do not correspond to the international norms in depth, distance from shore or location on the globe.

The bulk of the volume of wastes buried in northern seas—in the Kara, in the Novaya Zemlya Trench and in Sedov Bay, which is also near Novaya Zemlya—are low- and moderate-radioactivity wastes. Their total radioactivity is 15.5 kilocuries.

Submarines with two reactors containing unloaded fuel and another six reactor compartments, also with their nuclear fuel unloaded, buried at sea off Novaya Zemlya, present an ecological hazard due to their dilapidated state. An OK-150 reactor unit from the icebreaker "Lenin," from which 125 irradiated fuel elements had not been removed, is also resting there on the ocean floor.

The USSR dumped liquid radioactive wastes in Far Eastern seas from 1966 to 1991 in five areas. Basically near the southeastern part of Kamchatka and in the Sea of Japan. Activity reached its peak here in 1986-1987. At the same time there were no burials of reactors with their nuclear fuel unloaded in the Pacific Fleet. Still, the accident that occurred in 1985 aboard the nuclear-powered vessel undergoing repairs in Chazhma Bay (in the vicinity of Shkotovo), as well as the loss of a radionuclide power source with 357 kilocuries of radioactivity near Sakhalin during its transport by a helicopter, unquestionably influenced the ecological situation in that area.

In the admiral's words scientific research is being conducted systematically in the area of sea burial of radioactive wastes. There is no special concern regarding the radiation situation in the dumping area. But this does nothing to reassure specialists, and it does not reduce the acuity of the problem of salvaging nuclear-powered vessels.

The government's Decree No 644-42, adopted in August 1992, foresees practically the entire complex of priority measures for solving this problem. Among them are construction of temporary storage points for broken-down nuclear-powered submarines that are still afloat, refitting the shelters for submarine reactor compartments, construction of decontamination shops and of sections for the preparation of solid wastes for burial and for incineration in special ovens, and design of unique equipment for unloading reactor cores.

But so far, we have created only 55 new, specially protected steel transport containers (22 for the Northern Fleet and the rest for the Pacific) in which to ship spent nuclear fuel by rail to plants of the Mayak Scientific-Production Association in Chelyabinsk. One train of 18 cars has already left for there from Severodvinsk, and another is being loaded in Shkotovo. This is of course a great help to the fleet on the part of industry, Topilin said, but the measures adopted thus far are not enough. The train is able to carry only two reactor cores, while they need to be moved out in much larger numbers.

Naval seamen have already unloaded 33 of 93 nuclear-powered submarines. The reactor compartments of six submarines in the North have been cut out together with neighboring compartments, leaving the submarines afloat. They were prepared for long-term storage. Five such blocks were prepared in the Pacific Fleet. In the words of Vice Admiral Topilin, they are being protected dependably. The navy foresaw all necessary measures to prevent any accident, or pollution of the environment, and leakage or misappropriation of the nuclear materials, which has never happened by the way. But this doesn't solve the problem as a whole.

Submarines are being salvaged at a material base intended for ship repair. But the absence of possibilities for keeping warships presently in operation in serviceable condition is sharply reducing their operating life. Rather than lasting the planned 25-30 years, they grow old after 15, and sometimes even sooner, adding to the endless line of ships waiting to be stripped.

There is another step the military has taken: At the request of industrialists, they transferred 17 submarines gratis to the former Ministry of Ship Building Industry for stripping and sale of scrap metal abroad. This project was taken on by the Ekon Joint-Stock Company in the North and by the Russian-American company Stella in the Far East. The effectiveness of their work still requires deep analysis. For the moment their salvage operations are limited to one submarine each. But it is already clear that the profits the shareholders hoped for do not exist. There are only expenses. The building docks have to be refitted with new equipment, they have to be enlarged, special technology and gear have to be purchased, and all of this requires considerable initial capital investments. In the meantime profit may make its appearance by the 10th or 12th boat.

In principle, Topilin believes that the military should not be in the business of salvaging warships. That's not their task. They are supposed to receive a submarine or cruiser from industry, use it, and when it finishes serving the life allocated to it by the plan, return the object to industry for subsequent stripping, sale or whatever.

"But if the government orders us to do this work," he said, "the appropriate conditions will have to be created for us: both material and financial. You won't be able to complete such a task with the R900 million we have today."

Special docks for stripping and salvaging nuclear-powered submarines are now being made ready at the Kherson Ship Building Plant, and 1,600-tonne cranes have been ordered for this purpose. A floating facility for unloading the cores of ship nuclear reactors is being established at the Black Sea plant in Nikolayev. All of the equipment is 50 percent ready. It is true however that the seamen do not yet have the money to pay for it.

The Ministry of Atomic Energy has now begun planning a burial ground for radioactive wastes on Novaya Zemlya, and the locations of another three (in the North and two in the Far East) are being selected with regard for international scientific and ecological requirements and local public opinion. But whether the money for this will be found is another question.

In the meantime the navy is lobbying for the adoption of a state program by the Russian Supreme Soviet for handling radioactive wastes, and it is preparing to dump liquid radioactive wastes into the ocean. It has no other solution today.

The over-filled nuclear storage facilities, which are "breathing" radioactive heat, and the plugged-up reactors of nuclear-powered submarines are more terrifying than international sanctions.

Progress of Northern Fleet's Preparations for Winter

93UM0770A Moscow KRASNAYA ZVEZDA in Russian 11 Aug 93 p 2

[Article by Vladimir Gundarov under "The Garrisons Are Preparing for Winter" rubric: "You Cannot Save Much on the Wages of Stokers"]

[Text] Every year KRASNAYA ZVEZDA writes about the hard winter of the Northern Fleet. People suffer because of the lack of heat and hot water in dwelling houses and barracks and the combat training of the fleet forces is made more difficult.

Will the story be the same this time too? We asked our permanent correspondent for the Northern Fleet to study the problem.

It is better to see for myself once than to hear it a hundred times. I decided, as I headed for the remote garrison that the builders and operators speak of as the most unfortunate from the point of view of preparedness for the winter. The seamen of one of the coastal subunits told me that last winter they slept under two or three blankets that they took from fellow servicemen doing guard duty at night. It was hard to observe hygienic standards without hot water, as a result of which viral hepatitis spread at the post.

So here they see the reconstruction of the old decrepit boiler house as a solution to many vitally important problems.

"Everything is going according to plan," the post command assured me. "Some of the old boilers and furnaces have already been dismantled and new ones have been installed in their place."

At the construction site, perhaps the most important thing at the base right now, the assembly of new boilers was in full swing. Representatives of all services were gathered around the old furnaces like doctors around a sick person. Maj. Gen. Andrey Belov, chief of Severovoyenmorstroy, set the tone for the improvised conference. There is still much to be done: install tanks for fuel oil, provide a moorage to accept fuel tankers, extend a fuel line ... The builders promised that they will finish the work in September by the start of the heating season. Equipment and materials have been delivered and the work is proceeding at full speed.

They are also preparing intensively for the winter at other fleet bases and military installations and in the large formations and combined units. They have activated construction organizations of Severovoyenmorstroy, repair and operating subunits of the naval engineer service of the Northern Fleet, and more than 8,000 servicemen in the military units. Specialists from the naval engineer service of the Northern Fleet are working with no days off.

"If they gave me a helicopter, I would be able to do more," jokes Lt. Col. Yuriy Belyshev, deputy chief of the fleet MIS [machine testing station] for maintenance and repair.

In every joke, as they say, there is an element of truth. I will present several figures without which it is impossible to understand the volume of work being performed by the naval engineer service. The length of the engineer networks for the provision of hot water and sewerage is approximately 1,500 km. Electric supply lines are three times that long. Beyond that, several hundred dwelling towns have a total of about 50 km of mooring...

More than one-third of the work has now been completed. Is that much or little? If you consider that only 18 percent of the money normally required was transferred to the fleet for repairs and preparation for the winter, then you can only be pleased with what has been accomplished.

Col. Vyacheslav Kulikov, chief of the assembly section of Severovoyenmorstroy and honored builder of the Russian Federation, diplomatically agreed to reveal to me several secrets of his department. In particular, under their word of honor the builders were able to obtain half of the necessary amount of pipe and other building materials.

Taking into account the need to overcome the consequences of three wind storms that swept over the polar garrisons, the fleet needs many millions in additional financing. It received 150 million less for capital repairs in 1993 than in 1992.

A no less important problem is that of personnel. Who will operate the housing and municipal facilities and engineer systems over the coming winter? As of 1 July, the staffing of the sections of the naval engineer service had reached only 28 percent [of full strength]. In the spring, only 25 seamen came to the subunits of the sections of the naval engineer service. And this is for the entire fleet!

Last winter, as we have already reported in the pages of KRASNAYA ZVEZDA, officers and warrant officers from

warships went on watch in the boiler houses of some posts. Recently Maj. Alexandr Motus, chief of the sections of the naval engineer service of one of the posts, complained to me when we met: "Yesterday my last welder was dismissed at his own request...."

As a result of unprofessional operation, half of the boilers in the boiler house failed early and are now undergoing capital repairs. This work is the responsibility of Lt. Col. Valeriy Tsutsiyev, chief of the electromechanical service. In a neighboring combined unit, an industrial boiler house is in an analogous state for the same reason. But it is the industrial boiler houses that supply steam to the warships and storage bases for missile and torpedo weapons, including those with nuclear warheads. A certain stable temperature regime is supposed to be maintained in the structures where they are stored. And, to be honest, no savings in the wages of stokers, machine operators, and technicians can justify even one-thousandth of the consequences that can result from the failure of warships and possible breakdowns in the work of navigation and other systems of weapons.

By the way, there is still time before winter and the seamen of the Northern Fleet will try to do everything humanly possible to get through the winter without emergency situations.

Thefts From Baltic Fleet Arsenal Rampant

93UM0791A Moscow ROSSIYA in Russian No. 33

11-17 Aug 93 (Signed to press 10 Aug 93) p. 7

[Article by Svetlana Sukhova under the rubric "The Arms Shop": "Speaking for the Hostages"]

[Text] Kaliningrad—Literally everything is "wrong" here today. We are used to that. It is a terrible thing, however, when ordinary theft poses a threat to life and limb. Quite recently two criminals broke through the wall of a storage facility at one of the military units in Kaliningrad Oblast and carried off, unimpeded, six cases of F-1 grenades. Not only did no one try to stop them: the crime was not even detected at once, but almost 24 hours later.

Judging from the findings of numerous inspections conducted by the Baltic Fleet's military procuracy, control over the safekeeping of the combat arsenal is only a symbolic concept... Workers with the procuracy sometimes find ownerless mortars in the units, antiaircraft guns scattered around in disorder, unlisted aircraft missiles and other such things. It is not difficult to foresee the results of this frivolous, to put it mildly, regard for the safekeeping of weapons combined with a growing trend of criminal incursions on weapons in the BF [Baltic Fleet].

While 47 firearms were stolen in units overseen by the Baltic Fleet's military procuracy in 1991, 128 were taken in 1992, and 122 pistols, four semiautomatic rifles and eight grenades have been stolen in the first half of 1993. But this is only the tip of an iceberg posing a serious threat to the peaceful lives of the inhabitants of Kaliningrad Oblast.

The main danger stems from the excesses of weapons and ammunition in the Kaliningrad area. The specialists are of the opinion that there is such a large quantity of this property and that storage conditions are so unreliable, it is impossible to rule out the possibility of a serious accident.

Weapons and ammunition were stockpiled year after year, and the problems involved in their storage worsened. The time has come to state that no solution to the problem is in sight, and we are all hostages sitting on a powder keg.

The Gordian knot began to be tied in our "report" year of '45, when withdrawing units of the German army blew up the above-ground portions of ammunition dumps (in the vicinity of the present settlement of Shipovka), thereby concealing the approaches to the underground dumps. Our military specialists are still racking their brains over how to get into them without danger, in order to inventory the dangerous legacy and ascertain the actual degree of danger. There are 19 such dumps here. The underground storage facilities have never been investigated, but the specialists estimate that more than 100 railcars of German ammunition is stored there (various estimates range from 100 to 140).

There is also an enormous quantity of "Made in the USSR" ammunition heaped on the surface. Immediately after the war military depots of our own were temporarily located there. What is meant by "temporarily" in our country does not have to be explained to anyone, of course.

As a result of the present withdrawal of our troops from the Baltic states, according to the Baltic Fleet's military procuracy, the fleet's arsenals, bases and depots located in Kaliningrad Oblast are already at 50 percent above capacity. Nor have the Shipovka depots escaped this fate. The process of "pumping" weapons into the oblast continues, despite the fact that there is nowhere to put them, and up to 75 percent of them are stored in the open.

Almost half of the storage facilities are in need of emergency repairs, which are not being performed due to a "shortage of funds." Because of a lack of financing prospects, construction of much-needed reinforced concrete storage facilities has been halted. We need at least seven. Only half of the bases and depots in the Baltic Fleet are outfitted with technical security equipment, and that is either obsolete or in the process of becoming obsolete. A new, illuminated signaling system costs billions, though. If the Baltic Fleet is not in a position to secure its particularly dangerous installations even with common barbed wire (this fact went into the procuracy's latest report to the Russian Federation's Main Directorate of the Navy), it is clearly simply naive to count on billions.

The scrapping, destruction or sale of the weapons would help to untie the Gordian knot, but in the situation in which efforts are focused on meeting the timetable for the withdrawal of troops from the Baltic area and on the extraction of nonferrous metals from the cartridges, this poses a problem.

With respect to destroying the ammunition, this too was recently made impossible. Concerned about the ecological effects, the governments of the Baltic states have banned the explosion of ammunition at sites specially equipped for this purpose within the territories of these countries, and there is not a single such site in Kaliningrad Oblast.

The possible sale of some of our weapons to the Baltic countries, however, would seem to be not just acceptable but actually our salvation from both the military and the economic standpoints. The excess weapons stockpiled in

Russia are more than enough for the Baltic countries alone, and if we miss the chance to outfit their national armies with everything they need, we could lose out on a profitable market.

The process never gotten started, however. Perhaps there are restraining factors, but one has the impression that the capital's top officials simply do not have their sights on these problems. Moscow has no time for them. It is now busy with the referendum, now writing the constitution, now taking money from the population. It would not appear to be advantageous for the military themselves to pressure the government to sell the weapons outside. This is a state problem entirely.

The problems of the military are a result of hasty decisions. They cannot be solved with "internal reserves" (which is precisely the position periodically brought to the Baltic Fleet by the comrades in charge of it in Moscow). Nothing has changed yet, though, and we are all hostages. Just people. And we do not know that ourselves.

CIS: REAR SERVICES, SUPPORT ISSUES

On Possibility of Replacing Baykonur

93UM0724A Moscow KOMMERSANT-DAILY
in Russian No 95, 22 May 93 p 2

[Article by Aleksandr Stukalin: "Russia May Abandon Baykonur, Seek New Facility"; first paragraph is KOMMERSANT-DAILY introduction]

[Text] The Russian government yesterday took up the question of considering proposals made by the high command of the Military-Space Forces and the Russian Space Agency relative to the creation of a new facility for launching military and civilian space vehicles. Named by experts as possible locations of the new launch facility were the Kapustin Yar Missile Test Range and Krasnoyarsk Kray.

There is an agreement between Moscow and Alma-Ata relative to joint use of the Baykonur launch facility located on Kazakhstan soil, but the infrastructure of the installation continues to deteriorate as a result of financial difficulties experienced by both states and political problems in relations between the latter. In the opinion of the leadership of Russia's Military-Space Forces, the sums appropriated in 1993 for maintenance of the facility (28 and 0.4 billion rubles, respectively) will force the installation to effect a severe reduction in number of space programs and shut down some structures for the time being.

In the meantime, Baykonur remains as the sole space launch facility available to Russia capable of launching manned craft, heavy (weighing more than 7 tonnes) spacecraft, and stationary-orbit navigation, communications, and observation satellites for both military and civilian applications. In addition, Baykonur is also the sole facility equipped to carry out flight testing of all pre-series models of spacecraft, including reconnaissance vehicles, most of which after testing are launched from a second facility—in northern Plesetsk. Also, Baykonur was slated to receive the lion's share of commercial launches of foreign spacecraft, the number of which was due to increase. The quota of two

launches a year guaranteed Russia on the international level (see **HARD SIGN** for 21 May) is clearly insufficient, since, in the opinion of military experts, Russia would require three or four launches to pay for her national space programs, with Space Agency specialists putting this figure at 12 to 14 launches a year.

Observers feel that a situation in which an installation is so important for the defense and strategic civilian programs (such as aiding navigation for both sea and air transport craft) is located within the borders of another state is not to the liking of the Russian leadership and has forced the latter to search for an alternative. Also speaking in favor of building another facility was dealing with prospects of sharing with Kazakhstan the profits derived from the proposed commercial launches.

Russian Military-Space Forces spokesmen, while confirming that this issue has been taken up by the government, declined to identify the proposed site of the new facility and provide further details. **HARD SIGN** experts are of the opinion that to assure orbital parameters similar to those associated with Baykonur, the launch structures will in all likelihood be erected in the southern areas of Russia. The most probable locations are the Kapustin Yar Missile Test Range, which saw its last space launch about 10 years ago, and the Krasnoyarsk Kray area. High on the list of launch vehicles to be employed at the new installation are the Kosmos produced in Russia and the forthcoming Rus, Dvina, and Start.

New International Committee Aims to Protects Rights of Servicemen

93UM0710A Moscow *NEZAVISIMAYA GAZETA*
in Russian 17 Jul 93 p 2

[Report by Pavel Anokhin under the rubric "Action": "The Barracks Is Worse Than a Hot Spot"]

[Text] **The members of the new international committee believe that the barracks is worse than a hot spot.**

A new public association, the International Committee for the Rights of Military Personnel and Their Families, held its first press conference on Thursday, 15 July, at the Russian Press Center. Its main purpose is to coordinate the efforts of public organizations and citizens of Russia, the Commonwealth countries and other states to protect the honor and dignity and to safeguard the lives and health of military personnel.

The creation of the new public organization was necessitated by the fact that the social and legal problems of servicemen in the former Union republics have not been resolved and by the absence of a unified legal domain for servicemen of the former Soviet Army.

"Our joining together into an international committee," People's Deputy Anatoliy Alekseyev, the committee's chairman, stressed, "stemmed from the fact that these problems are being solved too slowly and ineffectively at the government level. Furthermore, the Main Administration for Supporting the Work of the Interdepartmental Commission on Social Issues of Servicemen, established in 1992 and headed by then Gen Aleksandr Tsalko, has demonstrated its total inability to solve the existing problems.

According to information provided by committee members, more soldiers in Russia's armed forces are dying from injuries and nonregulation relations today than at hot spots. The command element of the military units try to cover up the ChP [extraordinary occurrences], frequently passing off the deaths of servicemen killed as deaths resulting from sickness.

Yeltsin Edict Outlining OSTO Activities

93UM0743A Moscow *ROSSIYSKAYA GAZETA*
in Russian 29 Jul 93 p 6

[Russian Federation Presidential Edict No 1053, signed by Russian Federation President B. Yeltsin, Moscow, 23 July 1993: "Russian Federation Presidential Edict 'On the Activities of the Russian Defense Sports-Technical Organization'"]

[Text] As a result of the signing of the Intergovernmental Agreement on Joint Activity for the Promotion of the Work of the Commonwealth of Independent States Member-States Defense Sports-Technical Organizations (Societies) in Minsk on 28 April 1993, I resolve:

1. To support the activities of the Russian Defense Sports-Technical Organization for the patriotic education of citizens; the development of technical, applied, and aviation types of sports; the technical creativity of young people; the training of cadres of mass technical professions and military-trained specialists for the Russian Federation Ministry of Defense and other Russian Federation ministries and departments.

2. That the Russian Federation Council of Ministers-Government will take the required steps to realize the Agreement on Joint Activity for the Promotion of the Work of the Commonwealth of Independent States Member-States Defense Sports-Technical Organizations (Societies) and will implement state support for the activities of the Russian Defense Sports-Technical Organization.

3. That the organs of executive rule of the republics, krais, oblasts, and autonomous oblasts within the Russian Federation and the cities of Moscow and St. Petersburg will render all possible assistance to the Russian Defense Sports-Technical Organization to implement its charter tasks.

[Signed] B. Yeltsin
Moscow, the Kremlin
23 July 1993
No 1053

Federal Administration Chief on Defense Construction Projects

93UM0746A Moscow *KRASNAYA ZVEZDA* in Russian
3 Aug 93 p 2

[Interview of Col-Gen Aleksandr Tumanov by Ivan Ivanyuk: "The Central Board Which Builds the 'Defense Sector'"]

[Text] **Our paper has written dozens of times about this military construction organization. It has told about the people, seeing that there have always been remarkable workers in Russia, and about the construction jobs, which without exaggeration are familiar to the entire country. But**

the most important things in which this major construction board was involved have remained for many years behind the scenes.

Now it is possible to part the veil of secrecy concerning the what, how and who in construction of installations whose very existence many have not even suspected until recently. We will do this with the help of the chief of the Federal Directorate of Special Construction in the Council of Ministers of the Russian Federation, Col-Gen Aleksandr Tumanov.

"The central board was created in July 1953 by a decree of the Council of Ministers of the USSR on the basis of specialized directorates I and III of the central boards of the Council of Ministers," recounts Aleksandr Tumanov. "The *Glavspetsstroy* (as it was called until recently) included 14 construction and installation directorates, 10 separate construction sectors, and five industrial enterprises of various types. With these forces it had to perform a very responsible task, the creation of the Moscow air defense system, in a very short time. In addition to the special installations, it was necessary to construct an extensive network of roads, electrical transmission lines, substations, mechanization and transport bases, and much else. In the autumn a construction directorate was created in Leningrad for analogous work.

Already in 1955 the basic installations of the Moscow Air Defense System were turned over to the military department.

[Ivanyuk] And what was the continuation?

[Tumanov] Very hectic. In the same year of 1955 *Glavspetsstroy* was assigned the construction of installations associated with the development of industrial, scientific-research and experimental capacities of enterprises of the defense branches—general machine construction, radio-technical, ship-building, electronics and others. To implement this program, new military construction directorates were created in Saratov, Kuybyshev, Voronezh, Severodvinsk, and a number of other cities.

It is impossible to enumerate everything that was built by the hands of military construction specialists in those years. For example, the major complexes of aerospace machine building in Moscow, Samara, Voronezh and other cities. These developed the latest types of planes and spacecraft.

In the Sverdlovsk oblast such strategically important installations as a plant for production of titanium, and rigs for testing of rocket and aviation engines, etc. were introduced. A construction directorate in Severodvinsk, run by Col Anatoliy Polyakov, built the Center for Construction of Atomic Submarines from nothing.

In 1966-1967 construction began on a whole group of defense enterprises in Udmurtiya. The manpower of two construction directorates did an enormous volume of work, comparable with that which was done, say, by the seven directorates in Moscow. They built industrial giants such as the "Izmash" production association, with an annual production of 200 thousand motor vehicles and 450 thousand motorcycles, the Izhevsk Metallurgical Plant, supplying the "defense sector" with especially strong types of steel, the Izhevsk Motor Plant, which produced electronics for space, the Izhevsk radio plant, which produced very complex

instruments and household radio equipment, and the Botkin Machine Construction Plant, now familiar to the entire world, where they made the "SS-20" missile.

I can also mention those enterprises which were the foremost in their fields for years: the Korolev "company," the "Khromatron" and Khrunichev plants in Moscow, the "Svetlana" in St. Petersburg, the "Progress" in Samara, and many others.

Each of these installations required difficult engineering solutions from the builders and designers. You see, many of them contained unique technological equipment and used progressive large-span and high structures. And the deadlines in which the work was done were as short as possible. I shall give just one example from my experience, at the most simple stage, performance of earthmoving tasks. For vertical planing of a sector for construction of the Izhevsk Auto Plant with an area of 16 hectares, it was necessary to "move" 3 million cubic meters of earth in three months, and the capabilities which we had at that time were rates at 300 thousand cubic meters a year.

[Ivanyuk] Aleksandr Vasilyevich, what was your job then?

[Tumanov] Foreman, with the rank of lieutenant. I started my first construction project after graduating from the Kazan Construction Engineering Institute. Before then I had graduated from the Izhevsk Assembly Technical School.

[Ivanyuk] Did you succeed in meeting the work deadlines?

[Tumanov] We could not even imagine that they could be missed. Manpower from other construction directorates was mobilized, and most importantly, the men worked selflessly, not counting the time. They did not work for awards, although there were some. It was remarkable that of the five men awarded the title of Hero of Soviet Labor in *Glavspetsstroy*, four were laborers: the brigade chief of the painters Agrapin Galichanin, bulldozer operator Salom Nasredinov, the excavator operator Ivan Lebedev, and the brigade chief of the masons Aleksandr Kondratyev. There were also recipients of State Prizes and honored builders of the Russian Federation.

[Ivanyuk] How many enterprises, design bureaus and institutes did the central board build in all?

[Tumanov] I'd even have a hard time saying. In this time more than 18.5 million square meters of production space, around 20 million square meters of living space, many social and cultural facilities, and other installations for technological and auxiliary purposes were put in operation. In order to perform the assigned tasks, starting in 1953 we had to construct just for our own needs 34 industrial enterprises, including 3 housing construction combines. The industry of the Main Directorate produced more than a million cubic meters a year of reinforced concrete structures, around 700 thousand square meters of woodworking items, more than 3 million cubic meters of non-ore materials and much else.

But we are not only building the "defense sector." As a rule buildings and structures of complex engineering designs are assigned to *Glavspetsstroy*. The men of our subunits have built many civilian installations. These include the wonderful theaters at Izhevsk and Novorossiysk. We have

implemented complex development of Novorossiysk, Izhevsk, Severodvinsk and several other cities.

[Ivanyuk] And all this with a marked reduction in the volume of work in recent years, is that so? The sharp reduction in capital investments in the "defense sector" and conversion of the defense enterprises must have affected the work of *Spetsstroy*, didn't it?

[Tumanov] Of course it did. But we also have a kind of conversion going on, and this process has been quite painless. While before 1990 we annually put in operation 700-750 thousand square meters of industrial space and 500-600 thousand square meters of residential space, now the ideal would be to reverse this ratio. But the drop in production in the last two or three years has been so sharp that this year we will achieve in the best case 450 thousand square meters of housing. I'm not even talking about industrial construction.

Of course this has entailed a significant drain of personnel, although we have managed to hold onto many. Working in *Glavspetsstroy* was always a matter of prestige. For example, every year we took 40 graduates from the Moscow Construction Engineering Institute; there was competition to get into our system. Many officers at military schools also dreamed of working for us. We have always tried to create good working and recreation conditions for the men: we equipped polyclinics and hospitals with the latest technology and built health resorts and recuperation centers. Every year 10 or 11 thousand children spend their summers just in the recreation camps. Even now, in these difficult times, we are constructing a children's health resort with space for 450, to become operational in 1995. We are solving the housing problems of our workers. There were times when just for ourselves we were building 200 to 250 thousand square meters of housing a year.

For example, in Udmurtiya, not counting those who are building in the interests of agriculture, there had never been any other construction organizations, so that the greater part of the apartment resources in the republic were built by *Spetsstroy*. Now the task is to make housing construction the basic direction in the work of the entire central board. To do this, we are reconstructing the housing construction combines in Izhevsk and Novorossiysk. We have gotten actively involved in the housing construction program for service members. We have laid the foundations of the first homes in which the Black Sea sailors will live. We have created a new construction directorate in Anapa, and in Maykop we are negotiating analogous proposals with Adygeya. I believe that this is a very promising region, to which reserve officers will be glad to move.

[Ivanyuk] The *Spetsstroy* personnel can never get used to the strict deadlines, but can you maintain competition in terms of quality?

[Tumanov] Given good quality of construction materials and supervision of work, I believe that we can handle such tasks, and it is a fact that we build more cheaply, even if some of the materials have to be purchased abroad. We have experience in the construction of unique installations, as for example the bicycle track at Krylatsk, the Moscow Air Traffic Control Center, and the First Polyclinic for the Russian Ministry of Health. We are making every effort to acquire new experience as well. In 1990 we received a license for the right of foreign economic activity, and two

joint enterprises with foreign companies are already running. In this time we have managed to build a station for technical maintenance for the Soviet-Japanese "Innis" company. With the Canadians we have finished several offices for foreign companies, in particular for General Electric, Unilever, and Park Place. We are building an ice cream factory for the well-known American company Baskin and Robbins at one of the refrigerator combines in Moscow. So we are seriously thinking of reaching the world standard level.

[Ivanyuk] Aleksandr Vasilyevich, what problems most concern you at this point?

[Tumanov] Unfortunately, they "forgot" about us when the Law on Defense was prepared. So the question of possible reorganization of the Federal Directorate of Special Construction is on the agenda. We have submitted our proposals to the Supreme Soviet and the government. We hope that this question will be additionally considered and that a decision will be made on it. This must be done not only in order to prevent socio-economic upheavals in the labor collectives which have been developed over decades. Wouldn't it be reasonable to use our mobile subunits in the coming years to resolve the housing problem, the urgency of which is simply unbearable? And indeed, the defense enterprises must be kept in working condition, and ultimately they must be renovated. It is impossible to halt technical progress, including in weapons development. It is cheering that we already are finding support in the higher echelons of authority.

The second problem has to do with personnel. At present 115 thousand people are working at our construction projects, of them a little more than 20 thousand are military construction personnel. But while the volumes have been reduced recently by 10-15 percent, the number of working hands has shrunk much more. For example, the military construction brigades are now manned at less than half strength. We are hoping for help from the General Staff of the Russian Armed Forces to augment the military units of *Spetsstroy* to resolve the most urgent problem, construction of housing for service members, and accommodation of the Russian troops. We have always tried, and continue to try to recruit more civilian specialists for construction. We are reducing the number of military construction detachments, but we cannot get along without military construction personnel, performing their work in the interest of defense and in the interest of the service members.

Toporov Views Conditions of Far North Garrisons

93UM746B Moscow KRASNAYA ZVEZDA in Russian
3 Aug 93 p 2

[Interview with Col-Gen Vladimir Toporov by Aleksandr Ivanov: "Far North Already Preparing for Winter"]

[Text] KRASNAYA ZVEZDA has already reported that a group of generals and officers of the main central directorates of the Ministry of Defense of the Russian Federation, headed by the Deputy Ministry of Defense Col-Gen Vladimir Toporov, has been working in units garrisoned in the Far North. The purpose of the visit is to study the state of affairs with respect to preparation for winter, navigational deliveries, questions associated with the rear services, and medical and consumer commercial services for the service members and

their families, and to find the optimal ways of resolving key problems. Our correspondent met with Col-Gen Vladimir Toporov and asked him to characterize the state of affairs in the garrisons of the Russian troops stationed in the Far North and the Arctic.

The colonel-general stressed that "efforts to prepare the military camps and accumulate the authorized stores of materiel have allowed us to create the necessary conditions to implement combat training plans and assure continuity of daily operations of the troops, and to positively resolve the questions of supplying the service members and their families with everything necessary. "However for a number of reasons, including the great shortage of personnel, there are serious difficulties in supplying the military camps with everything necessary, in maintaining elements of the military facilities in working order, and in preserving the service and housing resources, as well as the stores of material.

It must be said that the North is now nothing like it was in song and poetry. Life in the North, because of specific economic difficulties which the country has encountered, has grown harder and to some degree perhaps less romantic. Essentially the benefits which have always been considered quite considerable now do not satisfy many.

The imbalance in the pay of civilian specialists of the Ministry of Defense in comparison with similar categories of specialists of other ministries and departments is quite significant. Hence the problem: in units and institutions of the rear services and the housing and utilities organs which support the daily operations of the troops, there is a great shortage of blue and white-collar workers. And the drain continues.

The shortage of military construction personnel and the cut in a number of subunits and military construction detachments, as well as insufficient financing, have led to cessation of construction of such important installations as the boiler buildings and the heating, water and electrical supply lines and the laundry facilities, not to mention housing, for an indefinite period.

Serious difficulties have arisen in chartering ships for navigational delivery and transport of material and equipment of reduced subunits, and in supplying service members with containers for transport of personal items, and in financing.

[Ivanov] So how will these problems be resolved?

[Toporov] The results of work in the Far North were reported in detail to the Minister of Defense. An order was issued with a specific plan for resolving problem questions. The responsible officials have been appointed, and deadlines have been set for action. By the end of navigation, and that is in September, the central apparatus of the Ministry of defense will check what has been done.

Today one of the main problems is how to prepare for the winter despite the existing difficulties. The basis of the work of all army organizations should be strict observance of financial discipline and limits. That is precisely the approach toward organization of the work in the military units which are commanded by Maj-Gen S. Namokonov and Colonels N. Kostyrev and A. Rumyantsev. Things are worse, in this context, in the collectives where Colonels V. Pishchuk and A. Gusakov serve.

In this navigational delivery period, the system of supplementation of stores was changed for the first time. Before, resources were allocated in a centralized manner, and everything necessary was purchased and sent to the individual garrisons and islands. Now, while the question of financing is very urgently on the agenda, deliveries to the North come from stores which are concentrated at warehouses of the military districts and fleets. Subsequently these stores will be replenished in the districts and fleets.

The shortage of military construction personnel is resolved by re-subordination of small construction and engineering subunits, which to this point have been separated by armed services under the same command. This makes it possible to more efficiently resolve the most important problems of the garrisons.

The appropriate assignments have been given to prepare proposals on improving the system of pay of the Armed Forces under conditions of the Far North, and to make changes in the distribution of the wage fund with allowance for the payment of a "northern coefficient" to everyone without exception and regardless of the received rates.

A package of proposals has been prepared for the government regarding a joint solution with the local organs of authority of a number of problems in the organization of navigational deliveries. First of all, this means the use of airfields and ports belonging to the civilian departments for delivery of the necessary cargoes and allocation of the necessary number of seagoing vessels and containers.

We hope that it will be possible to also resolve the question with payment for transport movements using military transport documents. For in a number of ports they have refused to accept cargoes, demanding only ready money.

[Ivanov] The mass media, including the foreign media, have recently asserted that Russia is compelled to remove its units and subunits from the islands in poorly accessible regions of the North due first of all to the shortage of financing. Is this true?

[Toporov] Mainly subunits of the Troops of Air Defense are being reduced on the islands. And not because there are no funds to keep them, but because of the principle of defensive sufficiency, within the framework of the reformation of the Troops of Air Defense of Russia. We approach the reduction, first of all, based on considerations of the advisability of a specific subunit being located in a given region.

Prefabrication Expertise Could Be Used for Housing Servicemen

93UM0766A Moscow KRSNAYA ZVEZDA in Russian
10 Aug 93 p 1

[Article by Ivan Ivanyuk under the "File Photo" rubric: "No Buran Without the Ball"]

[Text] This is not a mirage in a hazy desert or a shot from a science fiction film. This "ball," seemingly weightless, has a volume of almost 1,500 cubic meters, is made of strong steel, and possesses the capability of withstanding enormous pressures.

We are wont to say that our defense sector is capable of resolving unique tasks. This photo, which has been kept in the files of Konstantin Mikhaylovich Vertelov, a retired

colonel general and a Hero of Socialist Labor, presents an example of one of those "micro-tasks": the manufacture and assembly of tanks for liquid hydrogen and oxygen employed in the Energiya-Buran program.

Colonel General Vertelov, a former first deputy chief of construction and billeting of troops, was a member of an interdepartmental commission on project management and bore direct responsibility for equipment implementation.

"They were cryogenic tanks protected by shielded vacuum insulation," explained Konstantin Mikhaylovich. "They were manufactured by the Uralkhimmash Plant, with final assembly carried out directly on Baykonur by military builders working along with the Spetsmashmontazh Administration. We always operated in close cooperation with scientists and industrial specialists to insure the availability of parts and assemblies for ready installation. If the work were done manually, one item at a time, at the erection and construction sites, it is possible that our country would not now have a nuclear missile shield. We would not have been able to insure the quality of work or satisfy a work schedule without proper producibility of items and the application of the latest technologies to the defense sector. This method of final assembly of equipment manufactured by construction

industry plants was also successfully employed in the construction of nuclear power plants in the Urals, the modernization of missile silos, and to the creation of the PRO [antimissile defense] system.

It would be difficult to find a person who would not agree that only by means of scientific and technical progress is it possible to resolve the increasingly difficult tasks which crop up. One of today's priorities is the construction of housing for servicemen. So why not utilize the experience gained in construction that has been carried out on an industrial basis?

"As far back as the middle of the 1980s, we in the Ministry of Defense insistently proposed, without cutting back in other kinds of construction, the erection of residential facilities made of room-size box units," said Vertelov. "The technology for producing them was developed in a manufacturing environment. However, this idea unfortunately did not receive any support. What has happened is that, luckily, there is still in existence a box unit production shop possessing antiquated but usable equipment in a reinforced-concrete product combine located in the Moscow area. Last year it produced only seven residential units. This is a drop in the bucket with respect to resolving the housing problem, which will become even more acute in the next few years. It is a pity that the opportunity was permitted to slip by."

[Translator's note: Photo not reproduced.]

INTERREGIONAL MILITARY ISSUES

Russian-Turkmen Defense Cooperation Talks

93P50275A Moscow KRASNAYA ZVEZDA in Russian
14 Aug First edition p 1

[Russian Federation Defense Ministry Press Service report: "Agreements Initialed"]

[Text] On 13 August in the Russian Defense Ministry a regular round of talks between the defense ministries of the Russian Federation and Turkmenistan was completed. In the course of the talks, several agreements between the Russian Federation and Turkmenistan on military cooperation were initialed. Among them were agreements on military service by Russian Federation citizens in Turkmenistan's armed forces and their status, on the training of military cadres in the Russian Federation Defense Ministry's military educational establishments, on training sergeants and soldier-specialists from among the draftees serving in the Turkmen armed forces, and others.

Agreements dealing with military-technical cooperation and material-technical supply for Russia's and Turkmenistan's troops (forces), and with visits by ships and personnel of the Caspian Flotilla, were discussed on the working level.

UKRAINE

Military Intelligence Chief on Service's Role in Armed Forces

93UM0774A Kiev VECHERNIY KIEV in Russian
23 Jul 93 p 2

[Interviews with Aleksandr Skipalskiy, Chief of the Main Intelligence Directorate of the Defense Ministry of Ukraine, and with Dmitriy Vydrin, the Director of the International Institute for Global and Regional Security: "The Military Strives to Keep Intelligence and Counterintelligence in the Same Hands"]

[Text] On June 6 1993 Maj-Gen Aleksandr Skipalskiy was appointed chief of the Main Directorate of Intelligence of the Defense Ministry of Ukraine. He is a career intelligence specialist, with in his own words "a quarter century in the special services." He received his special training at the Moscow Higher School of the KGB. In 1990 he left the ranks of the CPSU, and because of that his personal file was examined personally by the Chairman of the KGB of the USSR. In early August 1991 the decision was made to discharge Skipalskiy from state security, but the coup intervened. He headed the Directorate of Military Counterintelligence of the National Security Service of Ukraine, and then moved on to the Defense Ministry. He works a minimum of 13 to 14 hours per day. He is married and has two daughters.

The last mention of Skipalskiy in the press was in a statement by the League of Officers of Belarus: "We call on officers and army and navy warrant officers of the League of Officers of Ukraine to part ways with their leadership, headed by Skipalskiy [name misspelled - V.Z.], who have taken the path of Ukrainian nationalism and obsequiously earn their general's shoulder boards, and [call on them] to express mistrust in the leadership [PRAVDA, July 8]."

We are presenting excerpts from a conversation with the major-general, the first interview after his appointment as

chief of the Main Directorate of Military Intelligence [GUVR], about which, in the opinion of Skipalskiy, it is still a little early to speak.

[Question] Will you retire from your post as chairman of the League of Officers of Ukraine [SOU] because of your new appointment?

[Skipalskiy] Looking at the big picture, it is inappropriate and physically very difficult to combine the two posts. But now the SOU is losing ground: it numbers from 7 to 10 thousand members. As a specialist I have no doubt that the decline of the organization has been inspired by those who are bothered by its patriotic tendency. Unfortunately, the leadership of the Security Service, the Ministry of Foreign Affairs, the Border Troops, and even to some degree the National Guard do not share the views of the SOU. Can I leave the organization in such a state? For now it is out of the question.

[Question] What provoked the reorganization of military intelligence? The absence of timely information from the army and navy?

[Skipalskiy] Planned development of military structures is under way. The more independent sources of information there are for the highest leadership, including intelligence sources, the better. But I believe that the intelligence service of the Armed Forces of Ukraine and of the state should be the same.

[Question] Why is military counterintelligence in Ukraine subordinate to the director of the Security Service rather than to the minister of defense?

[Skipalskiy] Many do not understand this. This was the situation in the former Union and it remains perhaps in Iran and apparently in North Korea. It dates back from the time of the GPU. In fact, military counterintelligence should be subordinate to those for whom it is working. Even the MVD has its own security service. But the Defense Ministry for some reason is not allowed its own. I hope that the President of Ukraine, as the commander-in-chief, will make the appropriate decision on this matter.

[Question] What sort of arguments did the opponents of the new special service offer?

[Skipalskiy] Allegedly this will be a "pocket," departmental structure under the defense ministry, which will not carry any weight.

[Question] How do you see the relations of military intelligence and the Security Service of Ukraine [SBU]?

[Skipalskiy] These are alternative services, each of which will perform its own set of tasks. The activity of the SBU is already regulated by special statute. But we have been waiting for the Supreme Soviet to adopt the Law of Ukraine "On Foreign Intelligence" in its first reading, which was planned back in May.

We asked the director of the International Institute for Global and Regional Security, Dmitriy Vydrin, to comment on the reform of military intelligence.

[Vydrin] As I see it, reorganization of the two departments of intelligence and creation of the Main Directorate of Military Intelligence, the GUVR, on their basis is the first

step in the development of a full-fledged Ukrainian intelligence. We are finally beginning to realize that the stronger our intelligence, the smaller the country's army can be. It is precisely those countries which have a developed, mobile intelligence which most effectively manage to save on their armies. As experience has shown, there are two requirements for this: the strength of intelligence and its direct access to the highest leadership of the state, and the trust of the latter in the data which is obtained. Ignoring either of these conditions leads to strategic defeat: these was brilliantly illustrated by the example of Hitlerite Germany and the USSR. Both countries had strong intelligence services, but either their leaders listened poorly to their intelligence, or the intelligence personnel did not have direct access to the highest officials. Later on the Soviet leadership corrected this error, and the intelligence organs of the USSR were connected directly to the political leaders. Mankind has recognized the exceptional importance of intelligence since ancient times. The first manual on intelligence which I know of was the ancient Indian manuscript "Artha Shashtra" dating from many years before our era. It offers lots of advice for the higher leadership about how to use intelligence data, and how to create intelligence networks. The development of every country and its place in history have been determined, to a significant degree, precisely by their level of intelligence. For example, we believe that the time of the Zaporozhskaya Sech was far from the worst period in the history of Ukraine. And if memory serves, intelligence was given very great importance in the Sech. It had six of its own intelligence organs, and a system of encryption, albeit naive, for operations with agents. In the time of its existence, unfortunately, intelligence has inevitably created many myths about itself. Many associate the acquisition of information with deception, cruelty and bribery. However it is important to distinguish the punitive and ideological special services from intelligence services proper, whose duties include the collection and synthesis of information. Besides, we live in different times. Today information is mostly obtained not by donning the uniform of an officer of a foreign army, but by using electronic and radiotechnical means, for instance by exchange of specific data at the level of understandings between two countries.

[Question] Why is it important for Ukraine to have its own intelligence service today, and however paradoxical this may seem, why is this also advantageous to other countries?

[Vydrin] The paradox is that a smart politician has an interest in a strong intelligence service of the other country, since such a country will not take abrupt, ill-considered actions. When a state has to bluff, it will start making diversionary maneuvers, and in this case the role of intelligence is incalculable. Almost all the countries of Southeast Asia, which in the postwar years made a unique technological leap, began by fooling the intelligence services of western countries, managing to convince them of the stability of their regions even though in fact there was no such stability. Western intelligence experts did a great deal to convince their own governments to invest money. But after large amounts of money had been invested, and stability turned out to be not all that sturdy, there was no way to back out. To a decisive degree western investments supported the "leap of the tigers."

Therefore, in creating our own intelligence, I believe that to a significant degree we must direct it toward creating

normal conditions for the work of the intelligence services of other countries. In particular, by agreeing on joint combat of the drug mafia and terrorism, and by coordinating actions with others, Ukraine will strengthen its own positions.

Undoubtedly one of the most complex problems of Ukrainian intelligence is that with the breakup of the Soviet Union, the main "whales" on which intelligence was based, the agent network, the infrastructure, the training institutes and the specialized subunits, all went to Russia. Ukraine on the other hand was left with strong special services in the form of punitive organs, practically without intelligence.

What may be used to intensively train personnel and prepare an intelligence base? Undoubtedly, in synthesizing and studying the enormous experience of intelligence, we need the history of Ukrainian and world intelligence, we need translations of numerous methodological works, from methods of intensive language training to a system of electronic intelligence. We need a profound and comprehensive study of the experience of those with whom the state is struggling, the drug mafia and the strong criminal clans, whose special services work at an extremely high level. And indisputably, we need to organize direct contacts with the intelligence services of other countries. While lecturing at West Point, I had an opportunity to become acquainted with the people who "will handle" Ukraine. They are prepared to cooperate; it is up to us.

Today it is my deep conviction that the buildup of the might of Ukrainian intelligence service should precede the buildup in might of the army. Evidently, we are going about it the opposite way because to this point Ukraine does not have its own doctrine. According to some data, it is possible to save one third of the military budget by having a strong intelligence service. There are also several purely economic advantages from maintaining a strong intelligence service.

I would hope that the creation of the GUVR will be the start of formation of a strong intelligence service. But in creating it, we ought to avoid the temptation to save money through monopolism. All the developed countries have several parallel structures. In that same United States, in addition to the CIA, the Treasury Department, the State Department, independent research centers, and major corporations all have their own intelligence elements. The value of information in the modern world is so great that it is too risky an affair to trust a single source. Therefore, while abandoning the mistaken desire to save through the elimination of parallel structures, we ought on the contrary to ensure and develop competition, in particular of the GUVR and SBU. Undoubtedly this should be competition rather than confrontation. Today unfortunately, considering our mentality of total opposition, confrontation is quite possible.

It is too risky to build a state without its own intelligence service. Just recall the visit of the President of Ukraine to China. Undoubtedly political intelligence could have informed the President that it would be a good idea to balance the visit to "red" China with a visit to liberal Taiwan, since Taiwan is a kind of "litmus test" of the liberal orientation of a country. In addition, capital should be sought precisely on the island China, since the investment resources of Taiwan are much higher. Or the visit of Prime

Minister Leonid Kuchma to the Arab Emirates, which occurred on a national holiday. Can one say that we have had intelligence up to now?

Morozov Answers Questions on US-Ukraine Military Relations

93UM0773A Kiev NARODNA ARMIYA in Russian
31 Jul 93 p 1

[Interview with Col-Gen Konstantin Morozov: "This Is the Start of Official Military Relations Between Ukraine and the U.S."]

[Text] During an official visit to the United States of America, the Minister of Defense of Ukraine Col-Gen Konstantin Morozov answered a number of questions put to him by phone by the Kiev correspondent of the Spanish information agency EFE Boris Klimenko and BBC radio correspondent Mikola Veresen.

[Question] What is your opinion regarding the fact that Ukraine has joined the Nuclear Weapons Non-Proliferation Treaty as a nuclear state, and what is America's attitude to this question?

[Morozov] The idea (of the nuclear state of Ukraine - B.K.) is a very serious one. You know what arguments there have been about such ideas. I believe that this question is not resolved here in the form in which it would be possible to speak of this. But I have resolved the first question: I announced such a position and I believe that it was accepted for consideration within the context of all other positions, and secondly, for study of all possible reactions and possible further coordination of positions. I set myself the task of announcing that in accordance with the situation which is developing in Ukraine, I am seeking intermediate variants which would promote resolution of the problem.

[Question] Are missiles indeed being dismantled?

[Morozov] Yes they are. Starting on June 15 we began early deactivation of the SS-19 missiles. Ten missiles and 60 warhead-carrying reentry vehicles and warheads will be removed for storage on the territory of Ukraine. I believe that this is not an intermediate event; this is not some sort of old, forgotten equipment. These are combat missile complexes which were aimed for decades at targets, and today we have begun to remove them even before ratification of the "START-1" Treaty by the Supreme Soviet. I see this as a very important step, an act of good will by Ukraine. An act which promotes trust, and this fact is appreciated here in Washington at a very high level.

[Question] Why does Ukraine need missiles at all, if it cannot use them?

[Morozov] This is true. But today the issue is not only to take operational control of the missiles, but also to allow for the interests of our state. We cannot give up such enormous valuables, in which years of labor by our people were invested, and hand them over free of charge to another state. And then, after the disassembly of all missiles, to purchase, at world prices, the materials for our nuclear power plants from that same Russia. It is a matter of heritage, of the capacity of Ukraine, of its right to part of those valuables which are contained in elements of the nuclear weapons.

[Question] There is a great deal of interest in the signed memorandum. What was its contents, and what is your opinion?

[Morozov] The memorandum is the result of our negotiations with Secretary Aspin during his visit to Kiev in June of this year at my invitation. It is the result of the work of several American and Ukrainian expert groups after the visit. It is the result of consultations between ministers. It is the result of negotiations in the Pentagon during my present visit. We arranged to agree on the text and to base it on the principles of mutual understanding and cooperation, and established the mechanism of organization of the work at the level of ministers and their representatives, and at the level of the chiefs of main staffs and their representatives. We established the basic directions of mutual negotiations and mutual visits, and study of situations on site in order to proceed from these political understandings and transform them into specific plans for further cooperation. It was signed immediately. The texts were adequately coordinated and mutually acceptable.

In the course of discussion of articles of the memorandum and the plan for further cooperation, not a single position of national security was cast aside or ignored. On the contrary, they all were considered within the context of European security and the national interests of the United States. I believe that the signing of this document was the start of official relations between Ukraine and the U.S., our military relations. I therefore believe that the list of indicated questions is not final, but lays the groundwork for expansion and deepening of relations. I believe that after a period of pressure and misunderstanding, we have taken a path of partnership, and this path is beneficial both to Ukraine and to the U.S.

[Question] Many say that Ukraine is essentially asking for money, that the main thing for here is money, and not nuclear weapons. Your comment?

[Morozov] It is a matter of understanding the dignity of state representation. No one asked for direct grants of money. There were negotiations having to do with clearing up the situation in which our country finds itself. A situation in which Ukraine nonetheless began to take measures for early deactivation of the missiles. A situation in which not one of the questions of provision of financial and technical assistance to Ukraine has been resolved. Instead there is just constant political pressure about when Ukraine will get rid of its nuclear missiles. There were clarifications of this type. And I believe that they were necessary and useful, and that the American side received them with understanding. I believe that this will give grounds to hope that in the near future we will be able to agree on certain other positions so that Ukraine will begin to receive financial assistance.

[Question] Will such a good start to U.S. cooperation provoke surprise in countries which are part of the collective security on CIS territory?

[Morozov] First of all, we are not hurting the interests of countries which are part of the CIS collective security. Ukraine did not join such a collective organization. Second, not only do we not hurt their interests, but on the contrary we consider the interests of European security within the context of security of these states as well. And in our

negotiations and understandings we have not done any harm to a single state. What is more, we have repeatedly proposed, and the American side supports this, organizing work at the level of tri-lateral experts, with the involvement of Russian experts. If this proposal is accepted by the Russian side, we will organize such expert meetings, and assessment of situations for preparation of some sort of mutually acceptable solutions.

[Question] You have a hard program for today: a meeting with Lugar, a visit to Andrews AFB and Norfolk. What do you expect from these meetings?

[Morozov] We will visit the Atlantic Naval Command to become acquainted on site with the organization of a troop command and control system. We are developing our Naval Forces and the appropriate specialists are part of our delegation. We will become acquainted with the procedures for creating optimal structures in these forces, ones which correspond to necessity and defensive sufficiency. We will become acquainted with officials with whom, in the context of understandings and within the framework of the development of the Ukrainian Navy, we will cooperate and exchange views, using their experience in these matters. We will also organize a mutual visit by representatives and ships of the Ukrainian Navy and the U.S. Navy.

BALTIC STATES

Former Defense Minister on Pullapaa 'Jaeger' Unit

93UM0756A KRSNAYA ZVEZDA in Russian
7 Aug 93 p 2

[Article by Valeriy Gromak: "Jaeger 'Removed' Estonian Defense Minister from Office: Soldiers of a 'Mutinous Company' Refused to Enter Into a Conflict With Russian Servicemen"]

[Text] Minister of Defense of Estonia Khayn Rebas has announced his resignation. According to Rebas, there were many reasons for this but all of them come under the heading of the "Pullapaa crisis." Pullapaa is the base of the mutinous jaeger company that declared its withdrawal from the defensive forces of the republic. The jaeger justified their decision by citing poor financing and supply and an intolerable leadership style of the high command. In withdrawing from the defensive forces, the company retains the status of a separate unit, its armament, and its clothing. In the opinion of the now former minister of defense of the Estonian Republic, behind the jaeger is Tiyt Made, deputy to parliament and chairman of the party of entrepreneurs of Estonia, and several other "overthrowers of authority." By the way, in an interview with Swedish radio the day after he announced his resignation, Rebas said that an armed action against the legal government is being prepared in the republic.

In commenting on this statement, the commander of the mutinous jaeger company Captain Asso Kommer agreed that "Rebas was not very mistaken." But he proceeded immediately to explain other reasons that forced the jaeger to withdraw from the defensive forces of Estonia. "There are reasons to believe," Captain Kommer said, "that our unit was sent to Paldiski (where a strategic facility of the Russian forces, a training center for naval forces, is still located—author's comment) for the purpose of provoking a conflict. The decision on this was made precisely at the time

when it turned out that there will be no conflict in northeast Estonia in connection with the holding of the referendum in Narva and Sillamya." "

As for the new minister of defense of the republic, the leadership of the National Independence Party of Estonia, to which this post belongs in the governing coalition, must name a new candidate within a week.

CAUCASIAN STATES

Fighting Continues in Azerbaijan

93UM0766B Moscow KRSNAYA ZVEZDA
in Russian 10 Aug 93 p 3

[Article by KRSNAYA ZVEZDA correspondent Petr Karapetyan: "Cease-Fire Broken in Nagorno-Karabakh, Both Sides Suffer Losses"]

[Text] The Ministry of Defense of Azerbaijan has reported that NKR [Nagorno-Karabakh Republic] self-defense forces have taken the village of Karamedly, which is located two kilometers from Fizuli, the rayon center.

There is fighting on the western edge of the town. Fizuli is also under attack from the north, with tank subunits being employed. A breakthrough in that location will signify that the town is surrounded.

The NKR headquarters blames the breaking of the cease-fire on the Azerbaijan Army, which has launched a large-scale assault on the Gadrut area of the NKR. It has been reported that the Azerbaijan Air Force dropped cluster bombs on the Martuni and Gadrut areas. There were dead and wounded on both sides. This was true for both the military and civilians.

In the two short weeks of the cease-fire, Karabakh did not become accustomed to the peace. Once more blood is being shed and lives lost.

Armenian Forces Continue Assault on Fizuli

93UM0780A Moscow KRSNAYA ZVEZDA in Russian
12 Aug 93 p 3

[Article by Vitaliy Strugovets: "Armenian Tanks Assault Fizuli"]

[Text] The CSCE's Rome Conference on Settling the Conflict in Nagorno-Karabakh began simultaneously with an offensive by defense forces of the NKR [Nagorno-Karabakh Republic] against Fizuli.

The end of July and the beginning of August brought another round of activity on the military and diplomatic fronts in the Karabakh conflict. The capture of Azerbaijan's Agdam Rayon in the second half of July and Kelbajar Rayon in April by Armenian defense forces of the NKR forced the UN Security Council to pass Resolution No. 853 on 29 July, calling unequivocally for these territories to be relinquished and all Armenian military formations to be returned to the territory of Nagorno-Karabakh.

The response by the NKR leadership to the UN Security Council resolution was the opposite of what was expected, however. Artillery shelling was begun on 2 August, and massive attacks were launched against Fizuli, a rayon center, on 7 August. Fizuli has been under fire since 9 August. According to the Azerbaijan's command element,

the Armenian forces plan to complete the capture of the city on 12 August. Fizuli Rayon is thus the third to be occupied. As of now the Armenian armed forces have occupied as much as 20 percent of Azerbaijan's territory.

The events have unquestionably influenced the shaping of public opinion and the positions of the governments of states with an interest in the matter. Russia's Ministry of Foreign Affairs, for example, announced that "Armenian armed formations have renewed active offensive operations," stating: "Further territorial acquisitions in the course of these operations will be regarded by the world community as a violation of international law."

What is the position of Nagorno-Karabakh's leadership? In an interview granted the Russian-Armenian News Center 2 days ago, Robert Kocharian, chairman of the NKR's State Defense Committee, declared that "the Nagorno-Karabakh Republic is observing the terms of the armistice and undertaking no military action." (This statement was absolutely identical to recent statements made when the Armenian side denied a fact known to everyone for 3 days following the capture of Agdam). With respect to the fighting in Fizuli Rayon, the headquarters of the Karabakh defense army has denied reports of intentions to capture the rayon center.

CENTRAL ASIAN STATES

Kyrgyz Volunteer Battalion To Be Sent to Afghan Border

93UM0743B Moscow NEZAVISIMAYA GAZETA
in Russian 28 Jul 93 p 3

[Unattributed article: "Kyrgyzstan"]

[Text] A Kyrgyz battalion that will soon begin guarding the Tajik-Afghan border jointly with Russian Federation border troop subunits was redeployed from Bishkek to Osh on 26 July.

The new battalion was formed solely from volunteers on a contract basis. The national guard and internal groups were not represented in it at this time. Contracts have been concluded with officers for three months and with sergeants and soldiers for six months. According to the terms of the contract, officers will receive a salary of R70,000-80,000 per month and privates from R23,000-30,000, 75% of which has been agreed to be paid in "som" [new Kyrgyz currency] and 25% in Russian currency. A series of benefits has also been provided for. Based upon the contracts, all Kyrgyz "salaries" are significantly lower than those that Russian and Kazakhstan pay their servicemen in Tajikistan today. This has also served as the primary reason why 15 servicemen have appeared in the battalion who have refused to serve after concluding a contract. Until recently, the battalion has also had problems with bullet-proof vests. Before being shipped from Bishkek, they had gathered 140 vests for 600 soldiers, the remaining to be delivered by aircraft from Moscow directly to Osh.

Kyrgyz Cadets To Study in Russia, Uzbekistan, Turkey

93P50277A Moscow KRASNAYA ZVEZDA in Russian
19 Aug 93 First edition p 1

[ITAR-TASS report: "Kyrgyz Youth Will Learn Military Professions in Russia and Uzbekistan"]

[Text] Young people from Kyrgyzstan are beginning to study in Russian and Uzbek military schools. In the State Defense Committee of the Republic of Kyrgyzstan it has been reported that 122 young persons, having been processed by the mandate commission, have recently left for Russia, and 40 for Uzbekistan.

A few dozen young Kyrgyz are now studying in military colleges in Turkey. Furthermore, about 30 young officers are raising their qualifications there. Thus, in a few years, warriors trained in Russia, Turkey and Uzbekistan will replace former Soviet officers in the Kyrgyz National Army.

Government Troops Attack Opposition Units in Tajikistan

93UM0755A Moscow KRASNAYA ZVEZDA in Russian
5 Aug 93 p 1

[Article by KRASNAYA ZVEZDA Correspondent Aleksandr Pelts: "Government Troops Are Conducting Offensive Battles"]

[Text] Gornyy Badakhshan is the new address of major combat operations in Tajikistan. On 1 August, authorities sent an assault force to this autonomous oblast that is intended to blockade and eliminate opposition armed detachments. However, government troops encountered the resistance of oblast self-defense detachments near the village of Sagirdasht and entered into an engagement with them.

Both sides suffered losses. The Gornyy Badakhshan Oblispolkom chairman's Security Issues Advisor Murabiz Akdotshoyev thinks that such operations of official Dushanbe can result in an actual war. Several villages have already been destroyed during the course of the battles and there are victims among the peaceful population. If that continues, the autonomous oblast leadership will be compelled to declare a general mobilization and will place from 70,000-120,000 men under arms. GBAO [Gornyy Badakhshan Autonomous Oblast] Chairman Garibsho Shabozov stressed that the oblast leadership still does not understand the motives for the offensive undertaken by government troops and that they do not know the location of armed opposition formations.

At the same time, we must specially stress that the initiation of combat operations in Gornyy Badakhshan will significantly complicate the quadrilateral negotiations on stabilizing the situation in Tajikistan that has been planned for the middle of August. Some independent observers fear that they will not occur at all since the reaction of the proposed negotiation participants to the latest events in Gornyy Badakhshan are quite unambiguous.

The Russian side, the first to render assistance to Tajikistan, will continue its efforts to prevent a new round of civil war in Tajikistan. This, as Russian Minister of Foreign Affairs Andrey Kozyrev stressed, is a priority direction of Russian policy in the Tajik direction. Moreover, he said that "Russia will not begin to compensate for a lack of political will for reconciliation in Tajikistan with the blood of its soldiers as that was at one time in Afghanistan".

ARMS TRADE

New Russian Arms Export Firm Described

93WP0213A Moscow KOMMERSANT-DAILY
in Russian 21 Jul 93 p 9

[Article by Mikhail Lashch: "'Russian Weapons' Will Contribute to the Development of Russian Military Exports: Plans of the Corporation 'Russian Weapons' Affirmed"]

[Text] *The establishment of the corporation "Russkoye Ouzhiye" [Russian Weapons] is an event that, in the opinion of observers, may noticeably change the existing disposition of forces in such an area of state foreign economic activity as military-technical cooperation. The special corporation, without encroaching on the existing state monopoly in trade with military technology in Russia, will help Russian industry to take its models to the international weapons market, finance programs for the development and production of experimental kinds of military hardware, and also participate in a whole series of social programs. The program for the work of the special corporation "Russian Weapons" was affirmed yesterday.*

The corporation "Russian Weapons" is a joint-stock company of the closed type; the board of founders includes managers of a number of joint-stock companies, including those established on the basis of the former ministries of the "defense bloc" and also the Moscow Export-Import Bank and "Voentekh," the state company for the export of arms. The authorized capital is 45 million rubles.

The board of directors of the corporation was headed by Stanislav Chernov, manager of one of the founders, the joint-stock company Special Machine Building and Metallurgy, and Aleksandr Temerko was elected president of the company. In the Soviet past, Chernov worked as general director of the Kirov plant in Leningrad and first deputy minister of the defense industry of the USSR, whereas Temerko was head of the Social Security Commission for military personnel under the Ministry of Defense. Both managers know all the details of the "underwater reefs" of military-technical cooperation and have solid ties with financial-industrial and governmental circles.

It is noteworthy that the establishment of the corporation was actively supported by a group of persons from the leadership of the Ministry of Defense of Russia, who in the spring of this year took a number of steps to establish a special agency under the Ministry of Defense of Russia to coordinate policy on the purchase and export of arms—the Federal Directorate on Questions in the Export of Arms and Military Hardware. At that time, precisely Aleksandr Temerko was proposed for the position of chief of this directorate. But Boris Yeltsin, who initially agreed with the proposals of Pavel Grachev with respect to the establishment of a "ministry for trade in weapons," then suddenly changed his position. "The Federal Directorate would certainly become just another superdepartmental structure encumbering the system of military exports and therefore they began to resolve this task from another angle," said one high-ranking official in the Ministry of Defense.

Right after this the initiative group began to establish the specialized corporation "Russian Weapons," whose board of directors included many former ministers of "the nine" (that is how they called the ministries of the defense bloc in

the Soviet past), who now head joint-stock companies of an analogous profile. These joint-stock companies produce all kinds of arms and military hardware. The board of directors of the corporation also included Arkadiy Volskiy, the leader of the Russian Union of Industrialists and Entrepreneurs [RSPP]. There are reasons to believe that the presence of Volskiy is linked not with the necessity of the political "pushing through" of projects of the corporation in the future but with the coinciding views of the RSPP and the industrial lobby in support of the corporation on the necessity of the restructuring of previous organizational-economic mechanisms under the new conditions. In the opinion of observers, the composition of the board of directors of "Russian Weapons" indicates the striving of the leadership to see the corporation as a financial-industrial company that participates in the entire process of military-technical cooperation.

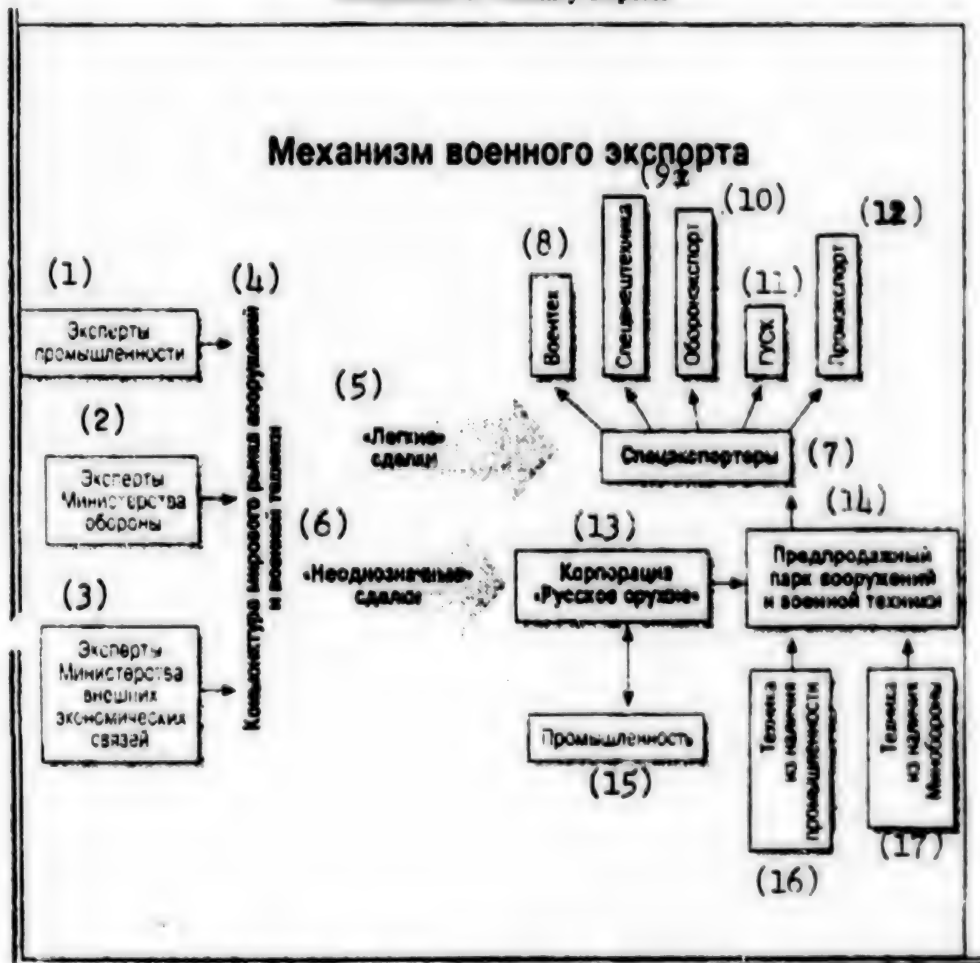
"The corporation 'Russian Weapons' will not intervene in the holy of holies of the Russian system of military-technical cooperation with foreign countries—the state monopoly in trade with weapons." This is the fundamental position of the leadership. All of the commercial operations of "Russian Weapons" will be carried out exclusively through the existing system of special exporters of the Ministry of Foreign Economic Relations and the Ministry of Defense. Observers think that the corporation will cooperate most actively with the state company "Voentekh," above all on account of the presence of its manager on the board of directors.

Judging by the intentions of the corporation's founders, its basic function is to help the domestic defense industry penetrate the world market for arms and other science-intensive machine building output. "Our tactic involves the establishment of long-term ties with the defense industry," says one of the managers of the corporation. In addition, with the participation of a number of banks, it is planned to establish an Interbank Financial House to provide the financing for export contracts and to participate in the advancing of money and payment of export orders in the industry for arms and military hardware. In this way, large financial groups will be able to participate in an area of foreign economic activity like military-technical cooperation that was formerly closed for investments.

An analytical center will also be established under the corporation. Its experts will analyze the world market for arms for the purpose of forecasting the most promising kinds of arms from the point of view of greater demand. With the help of the analysis of the state of the world market for weapons, the corporation will be able to orient domestic producers toward the production of competitive products, finance the manufacture of export models of hardware, carry out its final equipping in accordance with the requirements of the customer, and, in the event of more "risky" deals, establish a presale stock of hardware, buying it up from industry.

"Russian Weapons" is the first specialized firm that can be viewed as an attempt to establish a large financial-industrial group that accomplishes effective interaction between industry and existing state elements of the system for the export of arms. In addition, many high-placed officials in the leadership of the Ministry of Defense have stated recently that under today's conditions it is essential to have a mediator between industry and the army.

Mechanism of Military Exports



Key:

1. Experts in industry
2. Experts in the Ministry of Defense
3. Experts in the Ministry of Foreign Economic Relations
4. State of the world market for arms and military hardware
5. "Easy" deals
6. "Ambiguous" deals
7. Special exporters

8. Voentekh
9. Spetsvneshtekhnika
10. Oboroneksport
11. GUSK
12. Promeksport
13. Corporation "Russian Weapons"
14. Presale stock of arms and military hardware
15. Industry
16. Hardware from the stocks of industry
17. Hardware from the stocks of the Ministry of Defense

Weapons Sales to Asia-Pacific Region Viewed

93UM0768A Moscow *SEGODNYA* in Russian No 38, 30 Jul 93 p 5

[Article by *SEGODNYA* Correspondent Aleksandr Chudodzeyev, under the rubric: "Abroad": "We Will Sell You MIG's, You Will Sell Us Bananas: A Flow of Arms Is Sweeping Over the Asia-Pacific Region"]

[Text] At a time when the military budgets in the United States, in Europe, and in the former USSR are being reduced, in the Asia-Pacific Region, on the contrary, they

are growing. For example, in China, South Korea, Singapore, Thailand, and Taiwan, these expenditures are increasing sometimes by more than 10% annually. Malaysia recently announced that it will maintain expenditures for defense at a level of no less than 6% of the country's GNP for the next 10-15 years.

This is first of all a question of purchasing through import combat aircraft, early warning radars, ultra-modern missile systems, refueling aircraft, surface combatants, and submarines. All of this equipment is intended (especially in the countries of Southeast Asia) to prevent an external threat because internal insurrections or the operations of local

partisans have been put down practically everywhere. The nature of the purchases is also linked with the topography of that zone because the majority of the countries there are either archipelagos or islands and peninsulas and emphasis is being placed on security at sea and in the air.

Local analysts interpret this phenomenon as the aspiration to arm themselves and in no way as an arms race. Actually, if you exclude such explosive "tandems" as China—Taiwan and South Korea—North Korea, the weapons purchases are being conducted not in response to weapons purchases by a potential enemy.

The United States is the primary seller and the demand for its military equipment has increased even more after the Persian Gulf War. The Americans have nearly achieved a monopoly in deliveries of ultra-modern arms: South Korea, Taiwan, Thailand, Singapore, and Indonesia have selected the F-16 aircraft; Japan—the F-15 aircraft, and Australia—the F-18 and F-111 aircraft.

Russia's share in this market has fallen significantly since the beginning of the decade. Russian arms exports have actually fallen to a record low mark and totaled \$1.6 billion last year in contrast to \$30 billion in 1986. Vietnam and North Korea—at one time main purchasers of Soviet weapons—have practically ceased importing them. Yes and they, frankly speaking, are so-so purchasers: right now Moscow has an urgent need for hard currency but Hanoi and Pyongyang don't have very much of that. The gazes of Russian generals and admirals—businessmen from the military-industrial complex [VPK]—are currently directed at the wealthier clients in the region, all the more so that ideology already does not play any role whatsoever during deals.

Russian military exports are going first of all to China. The Chinese have purchased more than 440 T-72M tanks and they have concluded an agreement on the delivery of 26 SU-27 combat aircraft which will be the first genuinely modern aircraft at Beijing's disposal. It is rumored that Moscow has also offered to sell TU-22M3 supersonic long-range bombers. If this delivery occurs, it will undoubtedly cause quite a bit of commotion in the region. Moreover, Russia is supplying China with missile engines, modern radars and missile guidance systems.

In order to squeeze the Americans somewhat from their traditional arms sales market, Moscow is resorting to its own favorite tactic. Its age-old trump cards are arms sales at dumping prices and also barter.

The Japanese newspaper NIHON KEIZAI has asserted that the Russian Government proposed to Thailand to settle accounts for combat helicopters with the delivery of 0.5 million tonnes of rice. Russia lent Thailand approximately \$65 million for the rice deliveries at a time when Bangkok intended to purchase more than 30 helicopters for its Air Force. It was considered probable that they would be American Bell-212 aircraft. However, since the MI-16V helicopters offered by Moscow are cheaper, right now Thailand's military leadership is faced with a choice. This issue

will sooner be resolved during the course of Thai Army Commander-in-Chief General Wongwanit's impending visit to Russia.

This barter along the scheme "arms—food" is becoming increasingly widespread in Russia's deals with ASEAN [Association of South-East Asian Nations] countries. At the present time, the Philippine Government is studying the issue of paying for weapons delivered by Moscow with bananas.

Malaysia, the government of which in June of that year announced a decision to purchase 18 MIG-29 fighter aircraft in Russia to modernize its Air Force, will supply palm oil as partial payment.

But then again, in order to obtain it, native specialists will have to sweat quite a bit. Before his departure for Moscow, Malaysian Minister of Defense Razak stated that his country will insist on the Russian suppliers meeting a series of strict requirements during the conclusion of the contract for delivery of the MIG's. Specifically, this concerns increasing the duration of engine service life, strengthening the fighter's fuselage, and the installation of modern electronic equipment. This modernization will require from Russia the attraction of additional resources and quite a bit at that.

So, the battle of the former and current superpowers for the regional arms market is becoming more intense. The sellers, while considering demand and competition, are resorting to any methods of combat, right up to blows below the belt—open political pressure and blackmail. The buyers, having recognized that right now practically no bans exist on the purchase of ultra-modern types of weapons which the manufacturing countries previously decided not to sell due to ideological barriers, have rushed to buy them without looking back, as if trying to make up for lost time.

This policy does not threaten to destabilize the region while relations between countries remain entirely sincere which on the whole is occurring right now. But in the event of tension, a very real arms race will certainly begin. Experts have thought that, in 80% of the cases, an arms race associated with international disputes results in war. The question is being increasingly raised on how to prevent that course of events. But the prospects are not very reassuring. Even if the issue of real control of arms sales was resolved, that control would be unfeasible: how do you prevent the sale of a good on a market where there is a heightened demand for it?

The transfer of arms for deterrence and for reduction of the threat of aggression can give rise to directly opposite results and increase the risk of conflict. A policy, based first of all on trust, is not fraught with such threats. At the present time, the distribution of forces in the region unquestionably acts in favor of deterrence. An evolution has been noted in the last 2-3 years: the need for a "dialog on security issues" and on mutual trust has been repeatedly stated in official speeches. Nevertheless, not a single supplier is pondering a reduction of his arms sales and everywhere, without recognizing the danger, they think that security is inseparably linked with the accumulation of arms.

DOCTRINAL ISSUES

Hardening Troops Against Battle Fatigue

93UM0700A Moscow VOYENNY VESTNIK
in Russian No 5, May 93 pp 51-54

[Article by Ground Forces Deputy Commander-in-Chief for Combat Training—Main Combat Training Directorate Chief Lieutenant-General A. Golovnev: "Psychological Training of Troops"]

[Text] Studies that have been conducted in various countries convincingly attest to the steady increase of psychological trauma of personnel in a combat situation. So, if during the Second World War they totaled 6-7% of all losses, they already reached 25% in the local wars of the last decade. This is explained by the unprecedented tension of modern combat operations, their fast-moving nature, and massive employment of various types of weapons, including incendiary and precision-guided weapons. It's becoming obvious that under contemporary conditions it is difficult to overestimate the significance of psychological hardening of servicemen in the process of training and education.

Nevertheless, the importance of psychological training is not understood, and, at times, underestimated, here. For instance, leaders may approach the simulation of a combat situation at training sessions in a one-sided manner, losing sight of the measures that promote the morale-combat capability of rank and file, as well as sergeant and officer personnel. But this isn't due to "fashion" but an urgent need.

It's no accident that in many armies they think that the level of combat skill, the degree of mastery of weapons and military vehicles, and the state of military discipline first of all affect the morale of personnel. Although they are not ruling out material support (including food, living conditions, and others). "Strengthening the morale of the troops", states a British Royal Army regulation, "is the most important task of combat training". The moral stability of the troops is developed from discipline, fighting spirit, the will to win, self-control, a sense of their own dignity, devotion to duty, and a high awareness of honor".

Summing up the results of Operation Desert Storm, American Forces in the Persian Gulf Commander-in-Chief General Schwartzkopf dwelled in detail on the activities of commanders, special forces psychological brainwashing, military psychologists for morale-psychological support of combat subunits and units, and noted the effectiveness of the measures conducted by them that largely ensured success.

Just what do we have in mind when we begin to talk about the psychological training of personnel? This term is customarily understood to be a system of measures for the formation of the psychological qualities among servicemen and military collectives that are needed to accomplish combat missions. It is not a separate topic of training. This is a series of special measures that are organically part of the training process and everyday service through which the maximum correlation between the qualities of the individual and the collective and the elements of their combat mastery and the actual requirements of modern warfare is achieved.

Planned training sessions and exercises that approximate to the maximum extent possible actual combat with the employment of all of the weapons of armed combat are the foundation of psychological training. Ultimately, we need to strive for that situation in order that each serviceman clearly understands that any danger during the course of combat training that causes a state of internal tension mandatorily impacts on his subsequent actions. And not only in a negative context. It frequently causes the required activation of psychic processes, previously acquired knowledge and skills, and increases readiness for combat in critical situations.

Let's dwell upon just the most important missions of psychological training. They are reduced to the following.

First of all, to form physiological and psychological endurance of servicemen and to prepare them to overcome various difficulties of military service and for actions in extreme conditions with an enemy that is superior in force.

Second, to develop and strengthen among servicemen emotional-will resistance and such qualities as courage, valor, combat aggressiveness, perseverance, and the capability to withstand fear and panic.

Third, to develop the socio-psychological cohesion of servicemen based on military comradeship, mutual assistance in battle, and also the unconditional execution of commanders' (superiors') orders.

As for officers and warrant officers, the need has come to develop among them the capability to diagnose the morale of personnel, to teach methods and techniques for psychological impact on subordinates, and maintenance among them of the required mood for timely and qualitative execution of missions.

A definite system of psychological training has developed in the training practice of the Ground Forces which is subdivided into general, special, and specific. It includes measures for its support.

General psychological training assumes the hardening of personnel in accordance with the demands of modern combined arms combat. The conscious attitude of servicemen to those tests that they will encounter in an actual situation lie at its foundation. In the process, knowledge of the morale-psychological make-up and combat capabilities of the probable enemy's subunits and the techniques of armed combat with him are an essential condition.

Special psychological training envisions the development of high combat aggressiveness and psychological persistence among servicemen with regard to some or other forms of combat operations and their theoretical and practical training in specific dangerous situations that cause emotional stress. Many missions here are associated with teaching specific specialists and they are carried out in the process of combat training utilizing weapons and combat vehicles under conditions that approximate combat conditions to the maximum extent possible.

Specific psychological training is directed at developing a precise internal orientation toward the accomplishment of a specific mission in a definite type of combat, on combat alert duty, or while performing guard duty.

Psychological support is reduced to special activity directed at maintaining high psychological aggressiveness of servicemen during the course of combat operations or while accomplishing combat training missions. Specifically, excess tension is eliminated through various techniques and the negative psychological consequences of failures, accidents, and incidents are eliminated. Furthermore, steps are taken for the most rapid restoration of a psychological balance and self-control.

Formation among personnel of the required qualities in the process of training is attained through various methods and techniques. They depend primarily on the level of methodological mastery of officer personnel and the state and capabilities of training logistical and technical support facilities. The approximation of the training process to combat reality is the most important condition of the effectiveness of psychological training. Therefore, in training sessions we need to introduce elements of tension and surprise, danger and risk into any situation and train personnel over and over under these conditions to accomplish the methods and techniques that are being studied.

At the same time for the purposeful formation of abstract thought, attention and memory, we recommend striving for the aggressiveness and creativity of trainees, developing among them quickness of wit, resourcefulness, independence, initiative and confidence in their weapons and combat vehicles at all training sessions, training, and exercises. For this purpose, experienced commanders increase the ratio of practical training sessions in combat vehicles, with weapons, in simulators and different terrain with the simultaneous execution of mental tasks under complex conditions.

The execution of psychological training missions and the active introduction of elements of danger and risk into the practice of troop training certainly assume the precise organization and precise observance by all servicemen of the prescribed safety regulations and measures that have been set forth in the regulations, instructions and guidance of the combat arms and also in the firing and driving courses. The steps being taken are warning in nature, their goal is to prevent unfortunate occurrences and accidents associated with the serious injury and death of people, breakage of combat vehicles and weaponry.

Modern warfare even employing only conventional weapons has a strong impact on the psyche of soldiers. It is not that easy to go on the attack behind the explosion of one's own shells or to combat enemy tanks while on the defense. Each commander is obliged to remember that and to strive to approximate any training session to the conditions of actual combat. But no matter how close the situation is to a combat situation, it is psychologically not identically perceived by a soldier in contrast to an actual situation. At an exercise, a soldier does not see dead comrades, does not hear the groans of the wounded, and bullets and shell fragments do not threaten him. Therefore, he perceives everything around him with a significant amount of conventionality that impedes the accomplishment of training and educational missions. Of course, it is impossible to totally overcome that feeling but we need to lessen its impact. How?

As an example, let's examine the possible methods of forming the psychological capability to resist at tactical training sessions.

First of all, each commander is obliged to unceasingly struggle with oversimplification and relaxations of discipline and to skillfully select the time and place (area) of the tactical training session (exercise). The leader's thoughtful and comprehensive preparation is required in order for each training issue to be rehearsed in a new, complex situation. While accomplishing various tactical missions, we need to gradually build up psychic and physical loads (the actions of trainees are rehearsed based upon the standards both at full and at reduced strength). It is no less important to skillfully employ simulation systems for the formation of the correct perception of an actual combat situation among trainees. At times, we also encounter those commanders who oversaturate training sessions with measures for psychological impact on people, while losing sight of the fact that this type of abuse, especially during the training of young soldiers, can result in the appearance of timidity and faintheartedness among them.

There is a sufficiently broad arsenal of techniques that promote the accelerated formation of the required combat and psychological qualities among soldiers. They include reducing the time periods for accomplishing missions with inadequate information and encountering unanticipated obstacles and impediments in the process of a training engagement and the accomplishment of functional duties under complex weather conditions, with prolonged, active work in protective systems or total isolation from the collective. The system to train them to survive under various extreme conditions has substantial significance in strengthening the psychological capability to resist of servicemen. It includes the organization of anti-saboteur measures (guarding and defense of facilities, the search for the enemy and his destruction when detected, establishing fire ambushes and concealed surveillance posts, camouflage, etc.). Training with the employment of various types of firearms and edged weapons, including in total darkness by ear, while moving on foot and with transport vehicles, and in hand-to-hand combat provides a good effect.

Skills in protection from overheating and overcooling, prevention of various diseases and traumas, rendering medical assistance, preparation of food under field conditions, acquiring water and the techniques to decontaminate it promote keeping personnel fit for duty in difficult situations. Unfortunately, these issues, first of all medical support, are rarely and clumsily rehearsed at tactical and tactical-special exercises, especially in small detachments.

It is very important that trainees encounter dangerous situations and various types of difficulties during the course of training sessions and through other topics of training, naturally, with observance of safety requirements. For this purpose, the Manual for the Psychological Training of Ground Forces subunits is being reworked right now and prepared for publication in 1993.

Of course, in order to ensure the comprehensive psychological training of subordinates, an officer himself must be well trained in that regard. Unfortunately, we can still meet those leaders who do not always properly understand the essence

of the problem being examined. Worst yet, at times they themselves are not prepared to accomplish missions in complex, critical situations.

Performance evaluation exercises, specifically, where Lieutenant Colonel L. Levchenko (SZGV) [Southwestern Group of Forces] was the commander, lead us to that conclusion. Half of the officers here, based upon the evaluator's requirement, went out to the firing line at night and the procedure for showing and illuminating targets was also changed. Such an insignificant deviation from the customary caused the confusion and even bewilderment of certain officers. So it makes sense to pay the most serious attention to that issue.

Since the beginning of 1992, the appropriate structures that conduct the organization of psychological training have begun to function in military district, strategic formation, and combined formation combat training organs. The officers of the new organs have become actively involved in the process of establishing it in the troops. They have managed to define the priority directions of work, the circle of functional duties, and the methods and techniques of coordination with other interested services. Quite a bit has been done, by way of illustration, in the ZGV [Western Group of Forces], which General-Lieutenant V. Marchenko discussed in his interview on the pages of the magazine (VOYENNY VESTNIK, No 2, 1993). In the DVO [Far East Military District], ZabVO [Transbaykal Military District], and SibVO [Siberian Military District], recommendations have been developed on equipping training classes that ensure a modern level of the conduct of not only the appropriate training sessions but also other psychological hardening measures, including issues of the selection of personnel for a specialty.

As of today, the department of combat and morale-psychological training of combined formations, the majority of the officers of which are inclined to accomplish only the functions that are characteristic to staffs, has turned out to be a less effective element. In units with psychological training, for now there are difficulties as a result of the lack of the required knowledge and skills among many officers.

Nevertheless, in the process of the work we have managed to attract the attention of all categories of commanders to the problem that has been touched upon. Leaders of training sessions have begun to more aggressively utilize improvised and organic simulation systems and are introducing very complex elements. By way of illustration, for the first time issues of psychological hardening have been envisioned by the concept of operations of a battalion tactical exercise in the Northwestern Group of Forces.

A series of assemblies have been conducted, the appropriate recommendations and teaching materials have been developed, work has begun on the creation and improvement of training-logistical and technical support facilities to increase the level of information of officers in military districts while considering the increase of their capabilities for psychological hardening of personnel, subunits, officers and staffs. Based upon the initiative of the officers of the new organs, the newspapers of the Northwestern Group of Forces, Western Group of Forces, Far East Military District, Transbaykal Military District and other military districts have begun the systematic publication of articles under the rubric "Battle and Moral-Psychological Training".

In conclusion, let's note that the methods and forms of work with people are being formed among officers from the first days of their presence at a military school and are being improved in the process of further service in the troops. Hence, we need to develop the problems of psychological training and its methodological bases first of all at the appropriate departments of military educational institutions. It is advisable for scholars-experts in this sphere to conduct research at units and subunits, to effectively summarize the military practice of psychological training and, on this basis, to develop specific recommendations for the leaders of training sessions and training exercises.

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Defense at a Water Obstacle

93UM0700B Moscow VOYENNY VESTNIK
in Russian No 5, May 93 pp 89-90

[Article by Candidate of Military Sciences, Colonel M. Boroznyak, under the rubric: "To Assist Those Entering the Academy": "Defense at a Water Obstacle"]

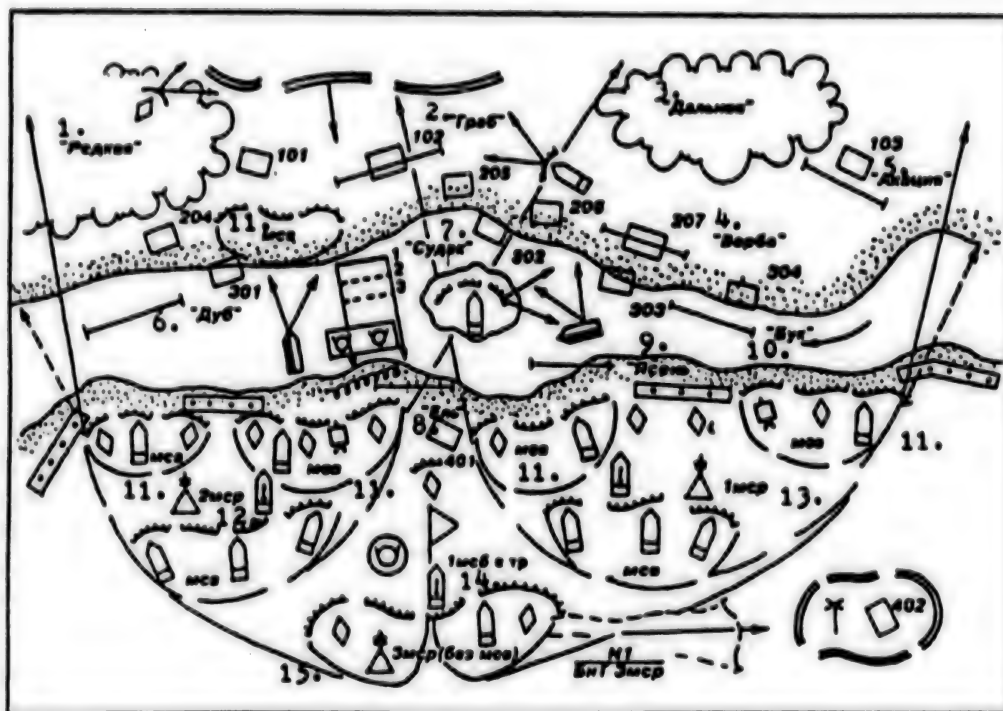
[Text] Combat experience indicates that water obstacles require significant time and special preparation to fight one's way across. In the majority of cases, they become the deciding factor in selecting the defense location.

As a rule, a motorized-rifle battalion, defending in the first echelon of the regiment, covers one assault-accessible direction (with a capacity of up to a brigade). The area of the defense along the front, depending on the geographic conditions, may be somewhat wider than the usual tactical standard and reach up to eight kilometers. When possible, the forward edge of the defense is designated closer to the water line and sometimes can be placed at a more favorable position (see the diagram).

A large part of the tanks, BMPs [infantry fighting vehicles], and various antitank weapons occupy firing positions within the first trench. If the forward edge is located near the water line, the second trench follows a favorable line, and the third can be occupied by the battalion reserve or is equipped as a reserve trench. Manmade obstacles are set up in the water and on the shore. In narrow rivers, they are built on both banks. In the water, as a rule, they are built at fords and possible crossing locations of tanks along the bottom.

The system of fire is organized within the impact zone of the battalion's weapons on the approaches to the river, on the surface of the water, and on the battalion's bank. Command-surveillance posts, artillery located near the water barrier, personnel and tanks that have been prepared to fight their way across, river-crossing systems and tanks that have advanced for direct laying are the targets to be engaged. The greatest density of antitank fire is created at sectors and at fords that are suitable for fighting one's way across. In the process, part of the weapons must be allocated to destroy tanks on the opposite bank.

Fire against the surface of the river is prepared with the calculation that the sectors for fighting one's way across will be covered by flanking fires and crossfires. Fire is planned on one's own bank in the event of having to repel enemy personnel who have crossed the river. On major and wide



Key:

1. "Rare"
2. "Hornbeam"
3. "Far-off"
4. "Pussy Willow"
5. "Acacia"
6. "Oak"
7. "Pike Perch"
8. "Spruce"

9. "Ash"
10. "Beech"
11. Motorized rifle platoon
12. 2nd Motorized Rifle Company
13. 1st Motorized Rifle Company
14. 1st Motorized Rifle Battalion with a tank company
15. 3rd Motorized Rifle Company (less a motorized rifle platoon)

ivers where there are river flotillas, a motorized-rifle battalion's system of fire is structured jointly with the fire of ships and small craft.

Defense of islands is tasked to subunits that are specially allocated to do that to warn of a surprise attempt by the enemy to fight his way across a water barrier and also to conduct flanking fire along the river.

During the defense of narrow and medium rivers, fire ambushes are set up on the approaches to the river, a combat security detachment is set up and a combat reconnaissance patrol is sent out to reconnoiter the enemy (when there is no contact with the enemy) and to warn of the enemy simultaneously fighting his way across.

Reconnaissance and leading enemy subunits with an approach to the river are destroyed with fire from ambushes, by river ships, allocated combat helicopter sorties, and by special weapons. Small teams that have crossed are seized prisoner or eliminated.

With the initiation of the enemy's main forces fighting their way across, the defenders use the fire of all weapons to destroy enemy river crossing equipment and to destroy personnel, weapons and equipment, especially during the

approach to the water and on the surface of the river. In the event of an enemy landing on the bank, the fire of all weapons is concentrated on the enemy and a decisive counterattack is conducted under favorable conditions. The tactical airborne assault force that has landed is destroyed by artillery fire and is blocked by the battalion reserve.

We advise you to read:

A. Ogurtsov. Na vodnoy pregrade [At a Water Obstacle], VOYENNY VESTNIK, No 8, 1991.

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MILITARY CONFLICT, FOREIGN MILITARY AFFAIRS

Contingency Planning in Tajikistan Urged

934F0963B Moscow NOVOYE VREMYA in Russian
No 31, Jul 93 pp 12-13

[Article by Sergey Modestov, candidate of military sciences: "And What Does the General Staff Think?"]

[Text] What principles make our interference in the problems of Tajikistan somehow self-evident?

Defense of the interests of the Russian population. Americans have gone decisively to the defense of their own citizens for considerably lesser reasons. But it is entirely the point that it is far easier to pull out a dozen or so students under the cover of an expeditionary corps than to guarantee the security of tens of thousands of people.

Providing protection for all these people on the territory of the republic is practically impossible. In addition, in using this circumstance to justify the presence of Russian forces, we could merely exacerbate the position of the Russian (Russian-speaking) population and provoke a directly opposite result.

Is it practicable to evacuate these people from Tajikistan, providing the involuntary immigrants with all they need to set themselves up on the territory of Russia? In the present socioeconomic situation, this is impossible to the full extent. But there is simply no other way.

Russians must be afforded an opportunity for unimpeded and organized departure from a republic which can no longer avoid the catastrophe of civil war. The exodus process has begun, and it is necessary to use the short amount of time which still remains to maximum effect.

Geopolitical calculations of strategic defense in the "Tajik forward defensive positions." Yes, this calculation is understandable. But just as understandable also is the fact that no forces in forward positions moved somewhat further away from the borders proper can substitute for the main line along which impenetrable security and defenses of the motherland should be organized. I refer to the line of the frontier with a structure of the grouping of forces and resources covering it echeloned in depth. The entire necessary amount of work on the deployment of such a grouping and the equipment of theater border areas should be performed as quickly as possible. The question, however, of the preservation of Russian forces on the territory of Tajikistan and of their actual participation in the civil war flaring up here may be decided only after this. I do not believe that an affirmative decision corresponds to Russia's interests.

Geopolitics are by no means exhausted by military-strategic considerations alone. This delicate sphere also presupposes, incidentally, such an aspect as historical responsibility for the fate of those who have with us a common past, in the determination of which Russia played far from the smallest part. This responsibility is brought about also by the political, legal, and moral obligations which Russia assumed as the heir to the USSR.

This is a far from speculative and highly pertinent argument in support of the continuation of the Russian presence in Tajikistan and all of Central Asia as a whole. Although we should recall again and again the actual position of Russia, making commensurate with it our geopolitical pretensions (it is better, of course, to be healthy and rich than poor and ailing, but, in any event, we have to be who we in fact are, without undue hankerings and inordinate self-importance).

Military-political prestige. Out of a concern not to disgrace ourselves we should think again and again about the fact that it is much simpler and easier to emerge from a difficult situation now than later, when we would be bogged down in new carnage. This war would not reward Russian soldiers

with an increase in the necessary combat experience and would not win fame for Russian arms.

The brief period of time, for that matter, which Russia would need to evacuate all those who so desire, close the Russian border, and withdraw in organized fashion the 201st Motorized Division and other Russian formations with the handover to government forces of Tajikistan of the facilities entrusted to them—it is by no means proposed that this period of time be spent doing nothing. The Russian military must perform its military duty, decisively defending itself and those under its care.

So for those with "itchy fingers" there is an excellent opportunity to test oneself in action and, should the occasion arise, show any enemy that Russians can stand up for themselves.

Personal Ambitions of Politicians. Thinking fellow citizens have already understood, evidently, how many there are of those wishing to make political capital for themselves by playing the national-pride-of-the-Great-Russians card. Very many, having suddenly become devout patriots and strong-state advocates, are literally getting in the way of those who are making the decisions. It is not surprising that the positions of certain irreconcilable legislators and representatives of the president's team have all of a sudden assumed closer order.

But should, on account of these narrow, selfish interests connected in one way or another with upcoming elections (and they will necessarily take place—a little sooner or a little later), critical material and technical and financial resources be thrown to the wind, not to mention the inevitable human sacrifices, the irretrievable loss of time, and the decline in society's already low confidence in the authorities?

Commitments assumed by Russia and the CIS. Fidelity to multilateral and bilateral treaties would seem an obvious imperative. Although it is somewhat strange to allude to the Friendship, Cooperation, and Mutual Assistance Treaty between Moscow and Dushanbe, which has been recalled only now and ratified under the pressure of circumstances.

We should seriously evaluate the progress of realization of the multilateral agreement on joint protection of the Tajik-Afghan border and seek a fair distribution of responsibility among Tajikistan, Kyrgyzstan, Kazakhstan, Uzbekistan, and Russia.

Preservation of the Nurek Hydroelectric Power Station on the River Vakhsh has to be a common task, for example. The threat of destruction of its dam could be used by an armed opposition to put pressure on the government. The thought that damage would be done not only to Tajikistan but to Uzbekistan and Turkmenia would not stop the Islamists.

Let us sum up. A political decision on Russia's line of conduct in Tajikistan (and in any other "flash point" on the map of the former Union where the question of defense of our interests arises) should be formulated not in fevered parliamentary skirmishes with deputies like Iona Andronov but on the basis of a situational analysis, which should be made under the aegis of the Security Council. It would be very useful were the Center for Operational-Strategic Research of the Armed Forces of Russia General Staff to

make a comprehensive evaluation of the various scenarios of the development of events and the resources required in this case or the other and also to forecast probable losses for this version of operations or the other.

We are tired of witnessing the adoption of hastily concocted and clearly unjustified decisions whose consequences are recognized merely in our own bitter experience. Nor is there now complete confidence that all the pros and cons have been weighed, just as there is no confidence either that objective national interests and goals have been clearly defined, the threats to Russia's security recognized, and an integral national doctrine (or, in American terminology, *military-political strategy*) corresponding to the new geopolitical reality formulated.

This is why there is no clear answer to a whole number of most important questions: What is the price at which our stay in Tajikistan would be justified; where is the threshold beyond which it becomes unacceptable? Why, speaking about our presence there, do we refer only to the military aspect? The military presence itself could have the most diverse forms and levels; operational tactics could vary also. I somehow doubt that only we lack answers to these questions. They are lacking higher up also.

Continued Russian Military Presence Advised

934F0963A Moscow *NOVOYE VREMYA* in Russian
No 31, Jul 93 pp 10-11

[Article by Arkadiy Dubnov: "Will It Not Be Possible To Leave Tajikistan?"]

[Text] The death of the border guards has shown that Russia is not today prepared for a modern, professional war. Why, then, has Tajik policy been in the hands of the military?

The attack on the 12th Border Guard Subunit in Tajikistan and the tragic death of 25 Russian border guards demand of Moscow an immediate political decision: to withdraw the troops or to leave them. But the problem of Tajikistan has, it would seem, been farmed out to the military.

Prior to this bloodshed, the Russian military presence on the territory of the neighboring republic had seemed to many people self-evident, and desirable, even. Russia's borders had been advanced, as it were, and Tajikistan had become, in military language, a strategic forward defensive position protecting us against the troubled Islamic world.

It is now clear that a price has to be paid for a military presence in a foreign state—in human lives. Civil war continues in Tajikistan. If the Russian forces, which have found themselves between two hostile camps, remain, they will incur even greater losses.

Is this in Russia's national interests?

Oriental Perfidy

The civil war in Tajikistan began with the events of May of last year, when the democratic opposition and the communist nomenklatura clashed. The clashes had been initiated by President Nabiyeu, who had armed his supporters headed by Sangak Safarov, a former criminal and subsequently leader of the People's Front.

The People's Front emerged in October in 1992, and it united detachments of the Kulyabis from the southern areas

and the Leninabaders from the north, who were in sympathy with them, that is, representatives of the clans which had traditionally ruled in the country. The People's Front was opposed by an alliance of the democratic opposition and the Islamic Revival Party (this odd alliance utterly discredited the democrats in time).

The military superiority of the People's Front was predetermined by the sympathy of the Russian Army units stationed in Tajikistan. Nonetheless, the communists had to agree to the formation of a coalition government with the opposition.

But the compromise was short-lived, because neither the People's Front nor the Islamists wished to share power. The Islamists attempted to seize the key positions in the government and organized the persecution of the president, which ultimately brought about Nabiyeu's ouster.

And fighters of the People's Front, meanwhile, were preparing for the conclusive elimination of their political opponents in the training camps—on the territory of Uzbekistan included.

Last fall the People's Front did not avail itself of an opportunity to achieve reconciliation. They dismissed the speaker of parliament. The People's Front came to power at the start of December. Its leaders blunted the vigilance of its adversaries, promising a pardon for those who laid down their arms, and with matchless oriental perfidy immediately launched a war against them. A war, of what is now the legitimate government, against political adversaries, who have become "enemies of the nation"—the Islamists and democrats.

The Refugees Are Returning, All the Same

Escaping the forces of the People's Front, tens of thousands of Tajiks crossed to the other, Afghan, side of the River Pyandzh. Dushanbe hoped to have put an end to the war, having rid itself of the undesirables.

But the refugees, finding themselves in camps in Afghanistan (and they were showered in pursuit from Dushanbe by threats and profanity), immediately began to prepare for a return home.

Some of the refugees are returning in organized fashion—with the aid of the UN High Commission for Refugees and a joint Afghan-Tajik government commission. Approximately 40 percent of those who fled across the Pyandzh have returned home this way.

Few of them have actually managed to take up residence in their homes. The local authorities are reluctant to take them back, as a rule. Other people have already settled in their homes.

Some of the refugees—mainly young men, desperate and with an uncertain future—are returning with weapon in hand. But Russian border guards, for whom the Tajik refugees are ordinary border intruders—have been in their way.

The border guards attempt to stop those who are returning home. The refugees shoot at the border guards. This war will grow, because detachments of Islamists are obtaining weapons and other assistance from their Afghan brothers in the faith.

Passive Voice

If Russia leaves, not simply will the civil war in Tajikistan resume; chaos, carnage and anarchy will begin, most likely. Neighboring states would want, possibly, with the help of their armies to restore order in the oblasts of Tajikistan bordering them. The zone of instability would approach Russia, threatening the security of Kyrgyzstan and Uzbekistan.

Nor is the fate of the 300,000-strong Russian-speaking population clear. This factor is present in all geopolitical and military-strategic calculations. Russia would constantly find itself in the passive voice, if it may be put this way, being blackmailed by this factor.

If Russia stays, it will be pulled into the war. The destruction of the border post, that is, a subunit of an elite arm of the service, confirmed that Russian soldiers are not prepared for conducting modern combat operations.

And even the Afghan experience has availed nothing (Russian soldiers in Tajikistan do not even have mine detectors that can detect plastic mines, which the enemy used in Afghanistan). Aircraft of the 23d Air Regiment based in Dushanbe were unable to go to the assistance of the border guards, because they were afraid that they would be shot down by SAM's.

Afghanistan showed that such a war could continue ad infinitum.

Tajik leader Emomali Rakhmonov (the speaker of parliament, he is head of state also) told Foreign Minister Andrey Kozyrev that reconciliation with the Islamists is impossible, because the opposition is "up to its elbows in blood."

The authorities in Dushanbe do not yet control the entire territory of the republic. The Islamists retain certain positions in the mountainous areas of Garm and Karategin, in Badakhshan and in the Afghan border zone.

By all accounts, without strong outside pressure on Dushanbe a domestic political settlement is impossible. Rakhmonov will display an inclination to compromise only in the event that Russia threatens to withdraw its forces and begins preparations for the evacuation of the Russian-speaking population from Tajikistan.

Is Moscow capable of forcing the present regime to share power with the opposition and remaining for the transitional period the guarantor of this reconciliation? Not the only one, preferably.

Four-party negotiations, with the participation of Russia, Tajikistan, Afghanistan, and Uzbekistan, are possible. Kabul has agreed. Moscow also, of course. Dushanbe's consent should, evidently, include a recognition of the right of the Tajik opposition to participate in these negotiations.

It is clear that this will take a long time. Given a favorable result, Russia could withdraw its forces and be confident of the safety of the Russian-speaking population remaining there.

Update on Conditions Facing Border Units

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in Russian 31 Jul 93 p 1

[Article by Vera Kuznetsova: "This Is a Question of an Armed Invasion, Think Russian Border Guards on the Tajik-Afghan Border"]

[Text]

Eyewitness

Yesterday, a Russian MID [Ministry of Foreign Affairs] delegation and journalists flew from Dushanbe to Moscow Border Detachment near the Pyandzh River.

Just like every day, battles continued without interruption. Therefore, the helicopter for the Russian delegation was practically extracted from the battle. The border troops commander apologized and said that he could not provide two helicopters. But along the border, two cover helicopters met the helicopter with the delegation and initially escorted to 12th Border Outpost which had recently been massacred and then to Moscow Border Detachment.

While maneuvering in the mountains, our helicopter flew over 12th Border Outpost several times. After that it became clear that it did not pose military-strategic interest for the attackers from Afghanistan. The Moscow Border Detachment border troops themselves think that the attack against 12th Border Outpost was a political act. Tajikistan Deputy Minister of Defense Aleksandr Chubarov said: "The bandits who come from Afghanistan are pursuing the goal of coming out on the Kulyab and Pyandzh axes and they must 'remove' border outposts to do that." In Chubarov's opinion, this can be done either by destroying or by frightening the border guards so that they leave. Border Troops Colonel Yarkov asserts that the attack against 12th Border Outpost began simultaneously both on the border and from the rear area. Moreover, it was from the rear that the approaches to the border outpost were mined by the attackers, therefore, when the Moscow Border Detachment reserve approached the border outpost, the border guards encountered a mined area (Italian mines). Some diplomats who are well acquainted with the situation in Tajikistan think that this dual strike was caused by the desire to provoke the Russian border troops and to draw Russia into this conflict.

Anyway why was it that 12th Border Outpost was defeated? Moscow Border Detachment commanders think that the first cause of the attack was that this outpost was built in 1989 when there was already peace with Afghanistan and the second cause is that it is located in an unfavorable location for defense. Right now several people are there performing their duties, spending the nights in tents among the ruins. But the new 12th Border Outpost is being built several tens of meters higher in the mountains. Today 16th Border Outpost is in a similar situation. It is in the cliffs opposite (across a ravine) an Afghan border outpost but the Afghans have built their fortifications in a location where the cliffs are somewhat higher and practically openly fire at our soldiers. They also plan to move 16th Border Outpost to another location. But Moscow Border Detachment commanders assert that for the time being they do not have enough men to do that. They also do not have enough equipment which the Ministry of Defense promised.

According to Colonel Yarkov's information, approximately 400 men from opposition formations—and their number includes Afghans and also frequently Arab mercenaries—are located in the rear areas. Several eyewitnesses confirmed the participation of Arabs in the attack against 12th Border Outpost.

Everyday information arrives through intelligence channels that strong detachments are being formed in the villages on the Afghan side. In Yarkov's words, last night Moscow Border Detachment obtained information that a 200-man detachment had spent last night in one of the villages. The Russian border guards and the Kazakh and Kyrgyz soldiers who have come to their assistance are restraining with difficulty the daily penetrations from Afghanistan. The border guards cannot open fire on the Afghan side and it is difficult for them to identify river crossing points in the mountains—so they have to eliminate the attackers' detachments already on their own side. This is already long ago not an issue of the individual violators who frequently covered the fact that they pan for gold on the Pyandzh River or that they cross for some other reasons, for example, that they are refugees. In the opinion of the leaders of Moscow Border Detachment, right now this is a question of an armed invasion.

Having arrived at the border detachment, the only thing that Russian Federation Acting Minister of Foreign Affairs Anatoliy Adamishin could do was to thank the border guards. Indeed, the Ministry of Foreign Affairs workers promised to resolve the issue of the exchange of old money. So, Gerashchenko's reform, which he conducted from the light hand of the Armed Forces and the government, reached even as far as here, to people who for months have lived in trenches and who cannot spend their salaries but

put them in a stocking. Monetary reform has graphically lit up the lack of social protection of Russian military personnel on a foreign border.

SECURITY SERVICES

Quality of Russian Officer Candidates Bemoaned
93P50271A Moscow KRASNAYA ZVEZDA in Russian
14 Aug 93 First edition p 2

[Report by ITAR-TASS correspondent Vladimir Gondusov: "Even a Lawyer's Diploma Doesn't Attract Them: The Internal Troops Command Is Seriously Concerned With the Problem of Filling the Officer Corps"]

[Text] Moscow, 13 Aug—Entrance exams for the military schools of the Russian internal troops are over. They caused serious concern among commanders and specialists for the future of the officer corps. Formally, the classes are full, but because of the lack of competition it was impossible to select high-quality candidates.

"I am deeply alarmed by the situation with recruiting internal troops officer cadres. One already feels how urgent the problem is. In a few years it will reach a critical point," Colonel Mikhail Mina, chief of the educational institutions department of the Russian internal troops, emphasized today in a conversation with an ITAR-TASS correspondent.

In his words, young people have no desire to put themselves in front of a bullet in "hot spots," or to secure Russians' public security in the present complex criminalogenic situation, in return for low pay and the absence of social guarantees and benefits. Today a lieutenant gets 50-60 thousand rubles along with chronic homelessness and tension on the job. Even the fact that a graduate of these schools receives a weighty and prestigious lawyer-jurist's diploma does not bring in students.

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